



# NVT HARVEST REPORT



MARCH 2024

Kwinana East  
Western Region





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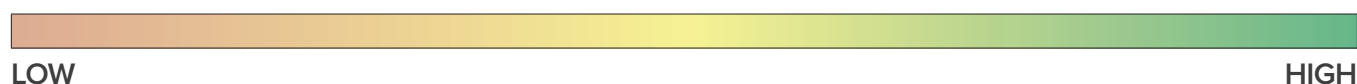
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## LEGEND: MEAN VARIETY YIELD PERFORMANCE



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](http://nvt.grdc.com.au/nvt-disease-ratings) to find the latest NVT disease ratings.

Refer to the latest *Crop Sowing Guide* for further information at  
[nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)

# INTRODUCTION

*The NVT Harvest Report - Kwinana East* provides information to support growers and advisers with decisions on variety selection for **Kwinana East**. 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 2023 and long-term yield performance of varieties of crop species suitable for production in **Kwinana East** together with their quality and disease responses.

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

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

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

## Interpreting long-term yield results

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

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

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

In the *NVT Harvest Report - Kwinana East*, 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 **Kwinana East**.

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

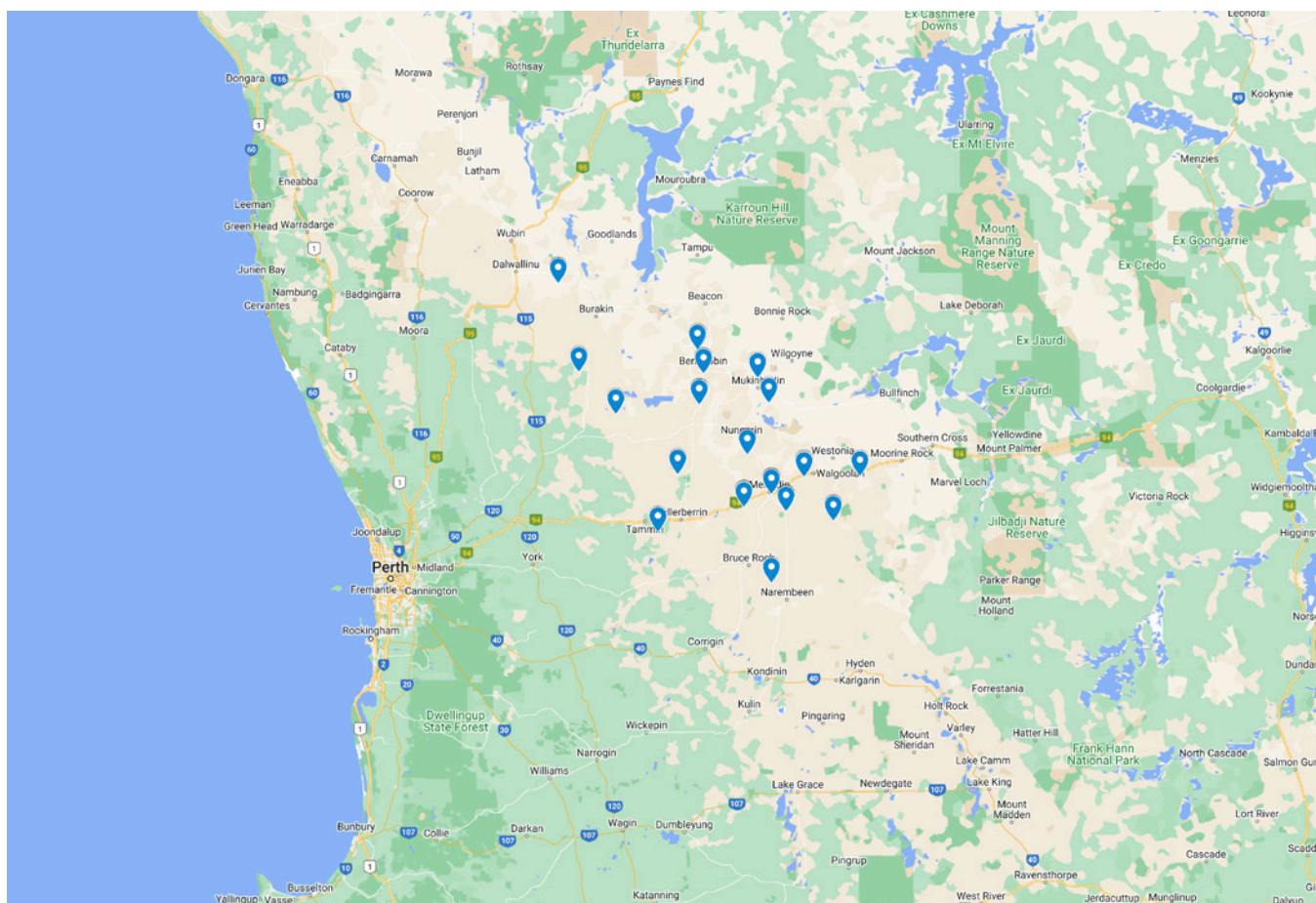
Trials listed as compromised are not suitable for making variety decisions. Results can be found in the [Quarantined trial reports](#).

▶ Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](https://nvt.grdc.com.au/resources/crop-sowing-guides)

## NVT SITE LOCATIONS – Kwinana East

Figure 1: Locality of NVT trial sites in Kwinana East from 2019 to 2023.

SOURCE: NVT Online



See all NVT trial locations and view trial results at [nvt.grdc.com.au/trial-results](http://nvt.grdc.com.au/trial-results).

# WHEAT

## New wheat varieties

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

| Variety                       | Breeding company              | Grain classification | End point royalty* (\$) | Comments supplied by breeding company <sup>1</sup>   |
|-------------------------------|-------------------------------|----------------------|-------------------------|--|
| Dozer <sup>®</sup> CL Plus    | InterGrain                    |                      | TBC                     | Variety description not supplied.  |
| Firefly <sup>®</sup>          | InterGrain                    |                      | 4.00                    | Firefly <sup>®</sup> is a high-yielding, mid-slow maturing ANW wheat, setting a new noodle yield benchmark for WA. Firefly <sup>®</sup> is suited to late April through to early May sowings, being similar in maturity to Zen <sup>®</sup> and Calingiri. Firefly <sup>®</sup> has an effective disease resistance profile, including good stripe rust and yellow spot resistance. Firefly <sup>®</sup> offers good physical grain characteristics, including good grain size.  |
| LRPB Matador <sup>®</sup>     | LongReach Plant Breeders      |                      | TBC                     | Variety description not supplied.  |
| Thumper <sup>®</sup>          | InterGrain                    |                      | 3.50                    | Thumper <sup>®</sup> is an exceptionally high-yielding, mid-quick potential AH wheat for WA. It offers a yield improvement within the mid-quick maturity class for low-medium rainfall areas. Thumper <sup>®</sup> has a robust disease resistance package with good yellow spot resistance, useful for wheat-on-wheat rotations, and an excellent stripe rust resistance. Thumper <sup>®</sup> offers good grain size, reducing screenings risk, and has adequate test weight. Thumper <sup>®</sup> is currently classified as APW in the western zone with an AH classification expected soon. |
| Tomahawk CL Plus <sup>®</sup> | Australian Grain Technologies |                      | 4.15                    | Scepter <sup>®</sup> -type Clearfield <sup>®</sup> variety with increased yield over Scepter <sup>®</sup> . The highest-yielding Clearfield <sup>®</sup> wheat variety in WA, South Australia and Victoria. Tolerant to Clearfield <sup>®</sup> Intervix <sup>®</sup> herbicide. Similar disease resistance profile to Scepter <sup>®</sup> . Similar grain size and test weight as Scepter <sup>®</sup> . Mid-season maturity, similar to Scepter <sup>®</sup> . APW quality classification in South Australia, Victoria, southern NSW, classification for WA pending.                          |

\* EPR amount is ex-GST, <sup>®</sup> denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)

## Wheat variety yield performance – Kwinana East

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: Bencubbin main season wheat.**

| Year                            | 2019  | 2020   | 2021              | 2022  | 2023   |
|---------------------------------|-------|--------|-------------------|-------|--------|
| Mean yield (t/ha)               | 0.89  | 2.22   |                   | 4.30  | 0.60   |
| Thumper <sup>db</sup>           |       |        | Compromised trial |       | 106    |
| Tomahawk CL Plus <sup>db*</sup> |       |        |                   | 107   | 119    |
| Calibre <sup>db</sup>           |       | 108    |                   | 110   | 121    |
| Devil <sup>db</sup>             | 111   | 107    |                   | 111   | 111    |
| Ballista <sup>db</sup>          | 110   |        |                   | 112   | 111    |
| Brumby <sup>db</sup>            |       |        |                   | 111   | 108    |
| Vixen <sup>db</sup>             | 130   | 115    |                   | 99    | 124    |
| Sting <sup>db</sup>             | 124   | 112    |                   | 102   | 121    |
| LRPB Matador <sup>db</sup>      |       |        |                   |       | 108    |
| RockStar <sup>db</sup>          | 97    | 103    |                   | 114   | 98     |
| Scepter <sup>db</sup>           | 113   | 108    |                   | 106   | 110    |
| Firefly <sup>db</sup>           |       |        |                   |       | 101    |
| Ninja <sup>db</sup>             | 98    | 103    |                   | 109   | 97     |
| Dozer <sup>db</sup> CL Plus*    |       |        |                   |       | 108    |
| Kinsei <sup>db</sup>            | 89    | 97     |                   | 113   | 91     |
| Sowing date                     | 7 Jun | 14 May | 14 May            | 6 May | 31 May |
| Rainfall J–M (mm)               | 24    | 96     | 146               | 97    | 45     |
| Rainfall A–O (mm)               | 153   | 149    | 225               | 268   | 113    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

| Year                            | 2019  | 2020   | 2021   | 2022   | 2023   |
|---------------------------------|-------|--------|--------|--------|--------|
| Mean yield (t/ha)               | 2.36  | 4.18   | 2.98   | 3.95   | 1.85   |
| Tomahawk CL Plus <sup>db*</sup> |       |        |        | 112    | 115    |
| Vixen <sup>db</sup>             | 111   | 106    | 110    | 111    | 115    |
| Calibre <sup>db</sup>           |       | 107    | 108    | 107    | 113    |
| Sting <sup>db</sup>             | 110   | 105    | 108    | 109    | 112    |
| Thumper <sup>db</sup>           |       |        |        |        | 107    |
| Devil <sup>db</sup>             | 109   | 108    | 108    | 107    | 109    |
| Brumby <sup>db</sup>            |       |        | 108    | 106    | 108    |
| LRPB Matador <sup>db</sup>      |       |        |        |        | 108    |
| Scepter <sup>db</sup>           | 108   | 106    | 108    | 107    | 108    |
| Ballista <sup>db</sup>          | 109   |        | 106    | 105    | 107    |
| RockStar <sup>db</sup>          | 106   | 108    | 107    | 104    | 104    |
| LRPB Avenger <sup>db</sup>      | 106   | 100    |        | 107    | 112    |
| Firefly <sup>db</sup>           |       |        | 105    |        | 104    |
| LRPB Havoc <sup>db</sup>        | 104   | 101    | 106    | 108    | 106    |
| Ninja <sup>db</sup>             | 104   | 106    | 105    | 103    | 102    |
| Sowing date                     | 7 Jun | 11 May | 24 May | 26 May | 31 May |
| Rainfall J–M (mm)               | 28    | 130    | 109    | 50     | 41     |
| Rainfall A–O (mm)               | 187   | 153    | 237    | 289    | 138    |

Special thanks to 2023 trial cooperator, Stewart Avery.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

| Year                            | 2019     | 2020   | 2021   | 2022   | 2023   |
|---------------------------------|----------|--------|--------|--------|--------|
| Mean yield (t/ha)               |          | 3.13   | 3.66   | 4.19   | 0.82   |
| Tomahawk CL Plus <sup>db*</sup> | No trial |        |        | 106    | 115    |
| Thumper <sup>db</sup>           |          |        |        |        | 102    |
| Calibre <sup>db</sup>           |          | 105    | 113    | 107    | 109    |
| Vixen <sup>db</sup>             |          | 108    | 112    | 103    | 116    |
| Devil <sup>db</sup>             |          | 105    | 111    | 107    | 107    |
| Brumby <sup>db</sup>            |          |        | 111    | 107    | 107    |
| Sting <sup>db</sup>             |          | 106    | 110    | 104    | 112    |
| RockStar <sup>db</sup>          |          | 103    | 110    | 108    | 102    |
| LRPB Matador <sup>db</sup>      |          |        |        |        | 107    |
| Scepter <sup>db</sup>           |          | 105    | 110    | 105    | 108    |
| Ballista <sup>db</sup>          |          |        | 107    | 109    | 104    |
| Firefly <sup>db</sup>           |          |        | 107    |        | 101    |
| Ninja <sup>db</sup>             |          | 102    | 105    | 106    | 101    |
| LRPB Avenger <sup>db</sup>      |          | 104    |        | 97     | 115    |
| Kinsei <sup>db</sup>            |          | 100    | 104    | 106    | 96     |
| Sowing date                     |          | 26 May | 25 May | 17 May | 31 May |
| Rainfall J–M (mm)               |          | 108    | 131    | 51     | 37     |
| Rainfall A–O (mm)               |          | 163    | 271    | 269    | 121    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

| Year                              | 2019  | 2020   | 2021   | 2022   | 2023   |
|-----------------------------------|-------|--------|--------|--------|--------|
| Mean yield (t/ha)                 | 1.53  | 1.96   | 4.10   | 5.16   | 2.03   |
| Tomahawk CL Plus <sup>db*</sup>   |       |        |        | 106    | 119    |
| Vixen <sup>db</sup>               | 117   | 120    | 113    | 99     | 120    |
| Sting <sup>db</sup>               | 114   | 115    | 108    | 100    | 116    |
| Calibre <sup>db</sup>             |       | 111    | 105    | 104    | 116    |
| Brumby <sup>db</sup>              |       |        | 106    | 108    | 110    |
| Devil <sup>db</sup>               | 107   | 109    | 105    | 107    | 111    |
| Scepter <sup>db</sup>             | 108   | 111    | 107    | 104    | 111    |
| LRPB Matador <sup>db</sup>        |       |        |        |        | 110    |
| LRPB Avenger <sup>db</sup>        | 116   | 116    |        | 94     | 116    |
| LRPB Havoc <sup>db</sup>          | 109   | 115    | 113    | 97     | 109    |
| RockStar <sup>db</sup>            | 99    | 104    | 104    | 111    | 104    |
| LRPB Anvil <sup>db</sup> CL Plus* |       | 116    | 112    | 90     | 114    |
| Thumper <sup>db</sup>             |       |        |        |        | 109    |
| Ballista <sup>db</sup>            | 106   |        | 100    | 104    | 110    |
| Firefly <sup>db</sup>             |       |        | 100    |        | 104    |
| Sowing date                       | 7 Jun | 25 May | 19 May | 18 May | 31 May |
| Rainfall J–M (mm)                 | 7     | 64     | 76     | 41     | 40     |
| Rainfall A–O (mm)                 | 216   | 125    | 298    | 338    | 216    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

Table 5: Merredin main season wheat.

| Year                            | 2019  | 2020   | 2021              | 2022   | 2023   |
|---------------------------------|-------|--------|-------------------|--------|--------|
| Mean yield (t/ha)               | 1.26  | 1.96   |                   | 4.66   | 0.76   |
| Tomahawk CL Plus <sup>db*</sup> |       |        | Compromised trial | 105    | 134    |
| Thumper <sup>db</sup>           |       |        |                   |        | 114    |
| Vixen <sup>db</sup>             | 113   | 125    |                   | 100    | 140    |
| Calibre <sup>db</sup>           |       | 108    |                   | 108    | 131    |
| Sting <sup>db</sup>             | 110   | 118    |                   | 103    | 134    |
| Ballista <sup>db</sup>          | 102   |        |                   | 111    | 118    |
| Devil <sup>db</sup>             | 110   | 106    |                   | 108    | 120    |
| Brumby <sup>db</sup>            |       |        |                   | 108    | 117    |
| Scepter <sup>db</sup>           | 109   | 111    |                   | 104    | 120    |
| LRPB Matador <sup>db</sup>      |       |        |                   |        | 117    |
| Firefly <sup>db</sup>           |       |        |                   |        | 105    |
| RockStar <sup>db</sup>          | 109   | 97     |                   | 109    | 103    |
| LRPB Avenger <sup>db</sup>      | 114   | 119    |                   | 93     | 135    |
| Dozer <sup>db</sup> CL Plus*    |       |        |                   |        | 112    |
| Ninja <sup>db</sup>             | 102   | 102    |                   | 107    | 101    |
| Sowing date                     | 7 Jun | 13 May | 12 May            | 12 May | 31 May |
| Rainfall J–M (mm)               | 14    | 100    | 68                | 81     | 42     |
| Rainfall A–O (mm)               | 208   | 170    | 188               | 319    | 141    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 6: Moorine Rock main season wheat.

| Year                            | 2019  | 2020   | 2021              | 2022  | 2023   |
|---------------------------------|-------|--------|-------------------|-------|--------|
| Mean yield (t/ha)               | 1.67  | 2.26   |                   | 4.08  |        |
| Tomahawk CL Plus <sup>db*</sup> |       |        | Compromised trial | 106   |        |
| Calibre <sup>db</sup>           |       | 112    |                   | 107   |        |
| Brumby <sup>db</sup>            |       |        |                   | 110   |        |
| Devil <sup>db</sup>             | 114   | 110    |                   | 109   |        |
| RockStar <sup>db</sup>          | 107   | 105    |                   | 114   |        |
| Vixen <sup>db</sup>             | 119   | 121    |                   | 97    |        |
| Scepter <sup>db</sup>           | 112   | 111    |                   | 105   |        |
| Sting <sup>db</sup>             | 118   | 115    |                   | 99    |        |
| Ballista <sup>db</sup>          | 111   |        |                   | 107   |        |
| Catapult <sup>db</sup>          | 109   | 99     |                   | 110   |        |
| Kinsei <sup>db</sup>            | 100   | 96     |                   | 113   |        |
| Denison <sup>db</sup>           |       | 94     |                   | 114   |        |
| Ninja <sup>db</sup>             | 101   | 102    |                   | 108   |        |
| LRPB Avenger <sup>db</sup>      | 118   | 117    |                   | 91    |        |
| Cutlass <sup>db</sup>           | 98    | 88     |                   | 111   |        |
| Sowing date                     | 7 Jun | 25 May | 13 May            | 6 May | 31 May |
| Rainfall J–M (mm)               | 61    | 79     | 63                | 63    | 63     |
| Rainfall A–O (mm)               | 234   | 161    | 253               | 296   | 124    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 7: Mukinbudin main season wheat.

| Year                              | 2019  | 2020   | 2021              | 2022   | 2023   |
|-----------------------------------|-------|--------|-------------------|--------|--------|
| Mean yield (t/ha)                 | 0.51  | 1.01   |                   | 3.26   | 1.60   |
| Vixen <sup>db</sup>               | 145   | 123    | Compromised trial | 112    | 124    |
| Tomahawk CL Plus <sup>db*</sup>   |       |        |                   | 113    | 124    |
| Sting <sup>db</sup>               | 141   | 120    |                   | 110    | 120    |
| Calibre <sup>db</sup>             |       | 117    |                   | 110    | 120    |
| LRPB Avenger <sup>db</sup>        | 146   | 121    |                   | 107    | 119    |
| LRPB Anvil <sup>db</sup> CL Plus* |       | 120    |                   | 104    | 117    |
| Devil <sup>db</sup>               | 119   | 109    |                   | 108    | 115    |
| Scepter <sup>db</sup>             | 118   | 109    |                   | 108    | 114    |
| Ballista <sup>db</sup>            | 123   |        |                   | 108    | 111    |
| Brumby <sup>db</sup>              |       |        |                   | 108    | 114    |
| Thumper <sup>db</sup>             |       |        |                   |        | 111    |
| Razor CL Plus <sup>db*</sup>      | 125   | 114    |                   | 105    | 110    |
| LRPB Havoc <sup>db</sup>          | 114   | 112    |                   | 106    | 111    |
| LRPB Matador <sup>db</sup>        |       |        |                   |        | 112    |
| Dozer <sup>db</sup> CL Plus*      |       |        |                   |        | 106    |
| Sowing date                       | 7 Jun | 25 May | 14 May            | 26 May | 31 May |
| Rainfall J–M (mm)                 | 18    | 87     | 131               | 75     | 74     |
| Rainfall A–O (mm)                 | 161   | 118    | 227               | 242    | 125    |

Special thanks to 2023 trial cooperator, Kilgobbin Farms.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 8: Narembreen main season wheat.

| Year                              | 2019  | 2020   | 2021   | 2022   | 2023   |
|-----------------------------------|-------|--------|--------|--------|--------|
| Mean yield (t/ha)                 | 1.00  | 1.69   | 3.11   | 3.50   | 0.00   |
| Tomahawk CL Plus <sup>db*</sup>   |       |        |        | 110    |        |
| Vixen <sup>db</sup>               | 128   | 121    | 111    | 107    |        |
| Sting <sup>db</sup>               | 121   | 117    | 107    | 106    |        |
| Calibre <sup>db</sup>             |       | 114    | 106    | 109    |        |
| LRPB Avenger <sup>db</sup>        | 127   | 118    |        | 103    |        |
| Scepter <sup>db</sup>             | 112   | 110    | 109    | 106    |        |
| Brumby <sup>db</sup>              |       |        | 109    | 108    |        |
| Devil <sup>db</sup>               | 109   | 109    | 108    | 108    |        |
| LRPB Matador <sup>db</sup>        |       |        |        | 107    |        |
| LRPB Havoc <sup>db</sup>          | 120   | 113    | 109    | 100    |        |
| LRPB Anvil <sup>db</sup> CL Plus* |       | 117    | 104    | 99     |        |
| Ballista <sup>db</sup>            | 106   |        | 103    | 107    |        |
| Razor CL Plus <sup>db*</sup>      | 116   | 112    | 103    | 101    |        |
| RockStar <sup>db</sup>            | 98    | 101    | 108    | 107    |        |
| Ninja <sup>db</sup>               | 98    | 101    | 105    | 104    |        |
| Sowing date                       | 7 Jun | 25 May | 13 May | 27 May | 31 May |
| Rainfall J–M (mm)                 | 26    | 63     | 92     | 76     | 23     |
| Rainfall A–O (mm)                 | 227   | 172    | 293    | 296    | 162    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN



Table 9: Trayning main season wheat.

| Year                             | 2019     | 2020   | 2021              | 2022  | 2023   |
|----------------------------------|----------|--------|-------------------|-------|--------|
| Mean yield (t/ha)                |          | 2.34   |                   | 5.08  | 0.98   |
| Tomahawk CL Plus <sup>db</sup> * | No trial |        | Compromised trial | 109   | 129    |
| Vixen <sup>db</sup>              |          | 120    |                   | 106   | 136    |
| Calibre <sup>db</sup>            |          | 113    |                   | 107   | 125    |
| Sting <sup>db</sup>              |          | 115    |                   | 105   | 130    |
| Thumper <sup>db</sup>            |          |        |                   |       | 111    |
| Devil <sup>db</sup>              |          | 110    |                   | 108   | 115    |
| Brumby <sup>db</sup>             |          |        |                   | 108   | 112    |
| Scepter <sup>db</sup>            |          | 111    |                   | 106   | 117    |
| Ballista <sup>db</sup>           |          |        |                   | 108   | 116    |
| LRPB Matador <sup>db</sup>       |          |        |                   |       | 113    |
| LRPB Avenger <sup>db</sup>       |          | 116    |                   | 99    | 131    |
| LRPB Havoc <sup>db</sup>         |          | 112    |                   | 102   | 120    |
| RockStar <sup>db</sup>           |          | 105    |                   | 108   | 99     |
| Razor CL Plus <sup>db</sup> *    |          | 109    |                   | 101   | 121    |
| Firefly <sup>db</sup>            |          |        |                   |       | 101    |
| Sowing date                      |          | 25 May | 15 May            | 7 May | 31 May |
| Rainfall J–M (mm)                |          | 64     | 103               | 71    | 62     |
| Rainfall A–O (mm)                |          | 157    | 229               | 273   | 127    |

Special thanks to 2023 trial cooperator, Luke Yates.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 10: Wyalkatchem main season wheat.

| Year                              | 2019  | 2020   | 2021   | 2022   | 2023   |
|-----------------------------------|-------|--------|--------|--------|--------|
| Mean yield (t/ha)                 | 1.11  | 1.65   | 3.24   | 3.86   | 0.67   |
| Vixen <sup>db</sup>               | 128   | 114    | 113    | 107    | 142    |
| Tomahawk CL Plus <sup>db</sup> *  |       |        |        | 110    | 130    |
| Calibre <sup>db</sup>             |       | 114    | 110    | 107    | 128    |
| Sting <sup>db</sup>               | 126   | 113    | 110    | 106    | 135    |
| LRPB Avenger <sup>db</sup>        | 129   | 111    |        | 103    | 141    |
| LRPB Anvil <sup>db</sup> CL Plus* |       | 109    | 109    | 100    | 141    |
| Devil <sup>db</sup>               | 113   | 110    | 108    | 107    | 114    |
| Brumby <sup>db</sup>              |       |        | 107    | 108    | 110    |
| Scepter <sup>db</sup>             | 111   | 108    | 108    | 106    | 117    |
| LRPB Matador <sup>db</sup>        |       |        |        |        | 112    |
| Ballista <sup>db</sup>            | 115   |        | 105    | 105    | 116    |
| Thumper <sup>db</sup>             |       |        |        |        | 106    |
| LRPB Havoc <sup>db</sup>          | 107   | 104    | 107    | 103    | 124    |
| Razor CL Plus <sup>db</sup> *     | 115   | 105    | 105    | 101    | 126    |
| Mace <sup>db</sup>                | 113   | 104    | 104    | 100    | 119    |
| Sowing date                       | 7 Jun | 25 May | 25 May | 20 May | 31 May |
| Rainfall J–M (mm)                 | 10    | 98     | 87     | 39     | 84     |
| Rainfall A–O (mm)                 | 250   | 137    | 246    | 277    | 140    |

Special thanks to 2023 trial cooperator, Marcus Reilly.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 11: Bencubbin early season wheat.

| Year                            | 2019     | 2020   | 2021              | 2022   | 2023   |
|---------------------------------|----------|--------|-------------------|--------|--------|
| Mean yield (t/ha)               |          | 2.20   |                   | 3.35   | 0.89   |
| Stockade <sup>db</sup>          | No trial |        | Compromised trial | 126    | 98     |
| IGW6755                         |          |        |                   |        | 138    |
| Valiant <sup>db</sup> CL Plus*  |          |        |                   | 103    | 133    |
| Denison <sup>db</sup>           |          | 115    |                   | 99     | 129    |
| Willaura <sup>db</sup>          |          |        |                   |        | 121    |
| RockStar <sup>db</sup>          |          | 114    |                   | 89     | 153    |
| Kinsei <sup>db</sup>            |          | 111    |                   | 91     | 140    |
| Illabo <sup>db</sup>            |          | 89     |                   | 126    | 60     |
| Cutlass <sup>db</sup>           |          | 106    |                   | 99     | 115    |
| Longsword <sup>db</sup>         |          | 96     |                   | 121    | 51     |
| Catapult <sup>db</sup>          |          | 116    |                   | 82     | 135    |
| Brumby <sup>db</sup>            |          |        |                   |        | 135    |
| Yitpi                           |          | 95     |                   | 88     | 114    |
| Magenta <sup>db</sup>           |          | 101    |                   | 85     | 109    |
| Sheriff CL Plus <sup>db</sup> * |          | 102    |                   | 67     | 124    |
| Sowing date                     |          | 21 Apr | 22 Apr            | 20 Apr | 23 Apr |
| Rainfall J–M (mm)               |          | 96     | 146               | 97     | 45     |
| Rainfall A–O (mm)               |          | 149    | 225               | 268    | 113    |
| Irrigation A–O (mm)             |          |        |                   |        | 10     |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 12: Kalannie early season wheat.

| Year                            | 2019     | 2020   | 2021   | 2022   | 2023   |
|---------------------------------|----------|--------|--------|--------|--------|
| Mean yield (t/ha)               |          | 2.72   | 4.16   | 3.83   | 1.47   |
| Stockade <sup>db</sup>          | No trial |        |        | 126    | 99     |
| IGW6755                         |          |        |        |        | 117    |
| Valiant <sup>db</sup> CL Plus*  |          |        | 104    | 101    | 121    |
| Denison <sup>db</sup>           |          | 107    | 108    | 98     | 121    |
| Illabo <sup>db</sup>            |          | 102    | 102    | 121    | 82     |
| RockStar <sup>db</sup>          |          | 111    | 104    | 95     | 125    |
| Willaura <sup>db</sup>          |          |        |        |        | 105    |
| Cutlass <sup>db</sup>           |          | 104    | 103    | 100    | 109    |
| Longsword <sup>db</sup>         |          | 94     | 106    | 112    | 85     |
| Kinsei <sup>db</sup>            |          | 104    | 102    | 90     | 123    |
| Catapult <sup>db</sup>          |          | 102    | 104    | 86     | 120    |
| Magenta <sup>db</sup>           |          | 98     | 97     | 92     | 99     |
| Brumby <sup>db</sup>            |          |        |        |        | 120    |
| Yitpi                           |          | 94     | 92     | 86     | 105    |
| Sheriff CL Plus <sup>db</sup> * |          | 90     | 91     | 73     | 106    |
| Sowing date                     |          | 21 Apr | 22 Apr | 14 Apr | 22 Apr |
| Rainfall J–M (mm)               |          | 108    | 131    | 51     | 37     |
| Rainfall A–O (mm)               |          | 163    | 271    | 269    | 121    |
| Irrigation A–O (mm)             |          |        |        |        | 10     |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

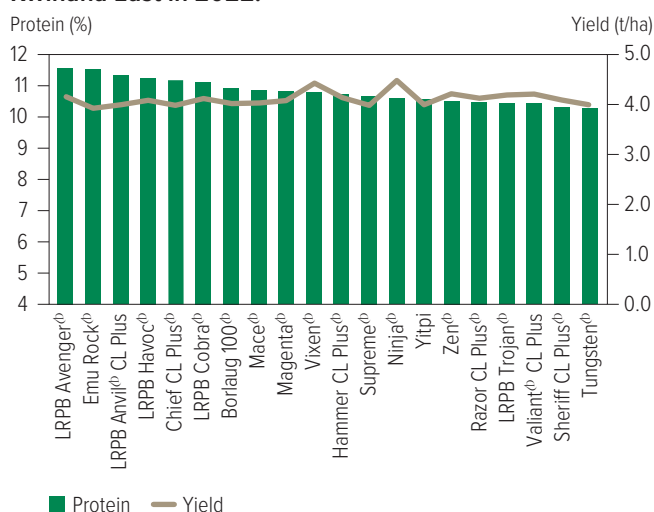
## Wheat variety quality – Kwinana East

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.

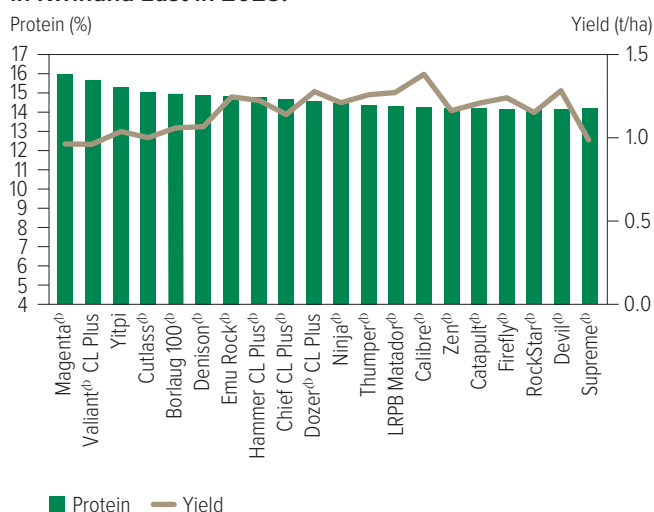
The following figures show the grain quality trends as histograms from 2022 and 2023 NVT averaged for trials in the Kwinana East region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

### Protein and yield comparisons

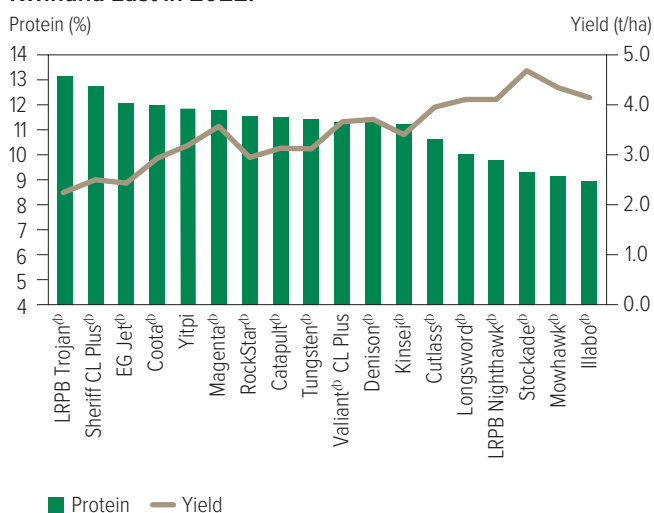
**Figure 1: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from 10 NVT sites in Kwinana East in 2022.**



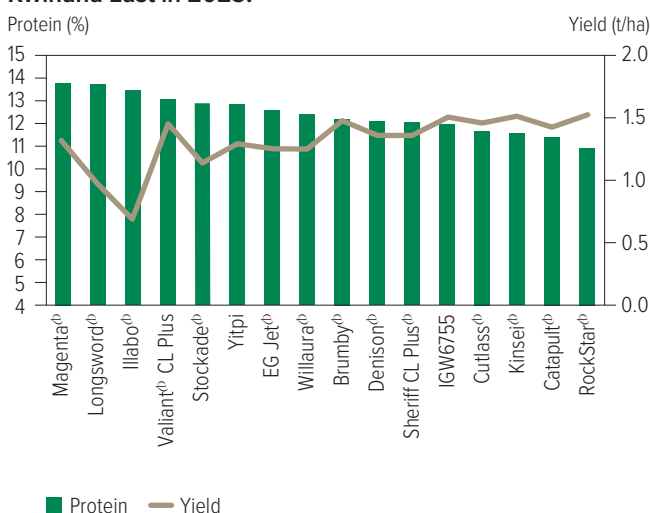
**Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from eight NVT sites in Kwinana East in 2023.**



**Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2022.**



**Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2023.**



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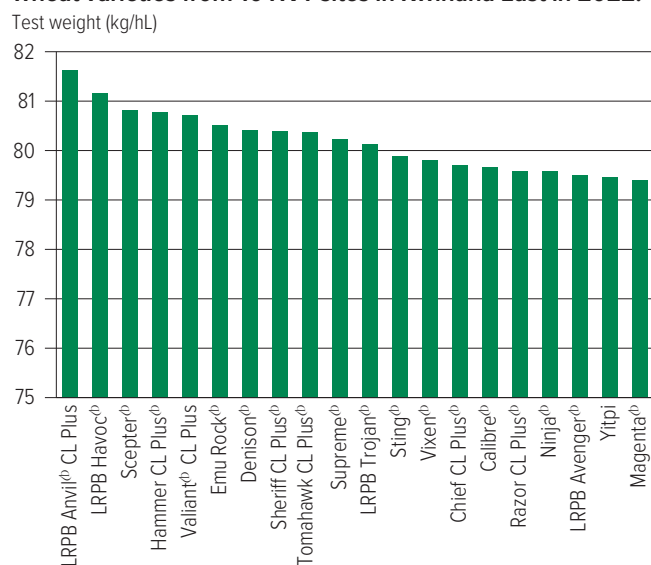
CHICKPEA

FIELD PEA

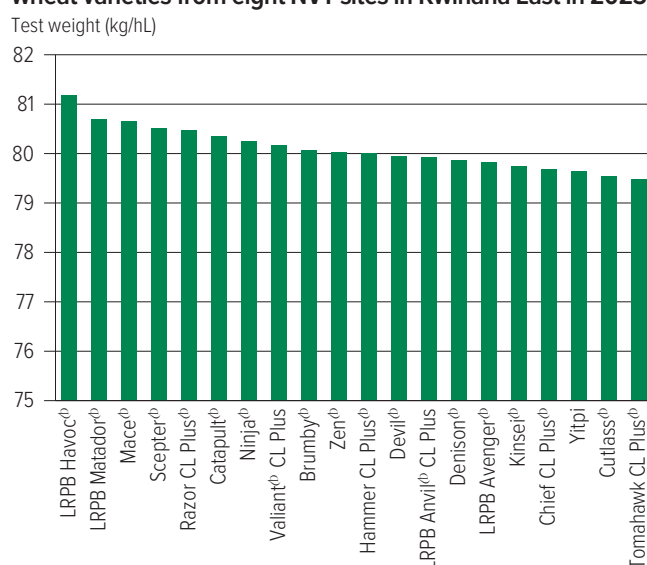
LUPIN

## Test weight comparisons

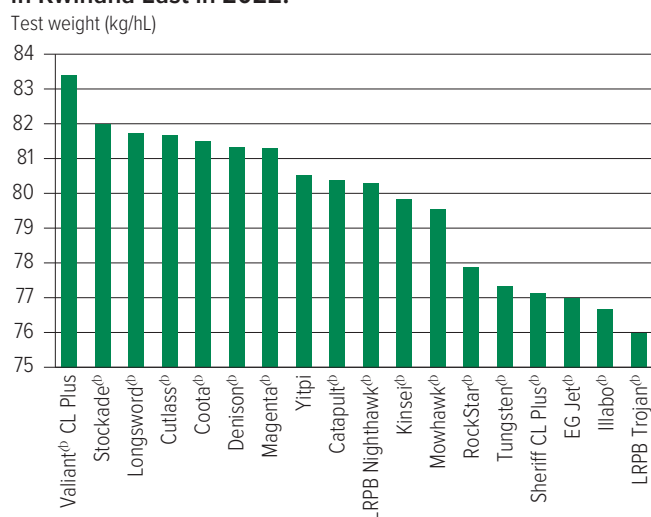
**Figure 5: Test weight (kg/hL) comparisons for main season wheat varieties from 10 NVT sites in Kwinana East in 2022.**



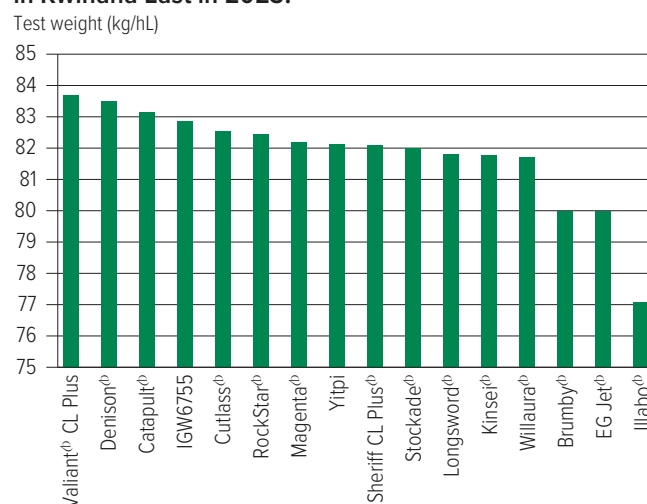
**Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from eight NVT sites in Kwinana East in 2023.**



**Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2022.**



**Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2023.**



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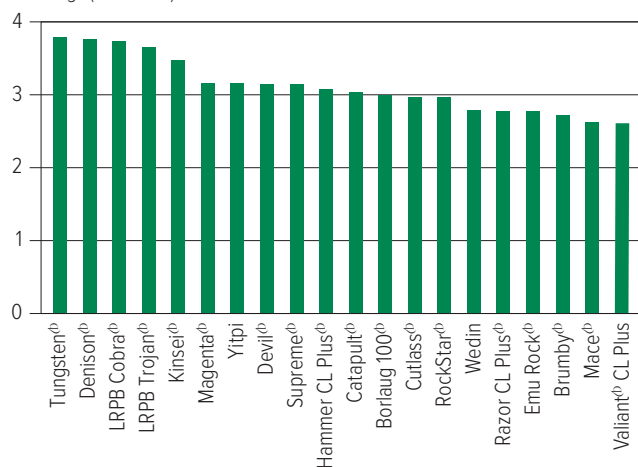
LUPIN



## Screenings comparisons

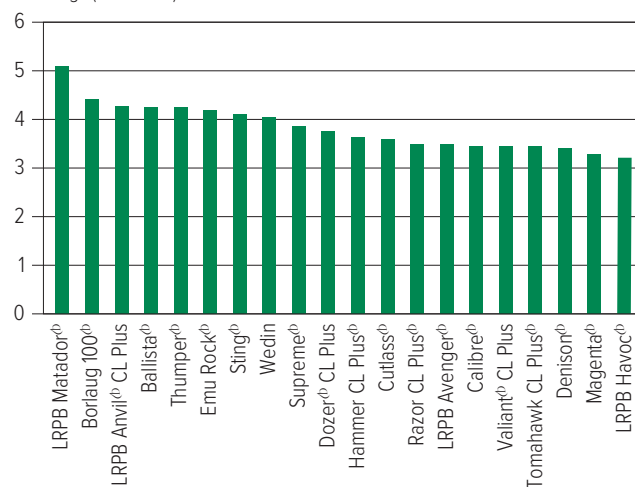
**Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from 10 NVT sites in Kwinana East in 2022.**

Screenings (%<2.0mm)



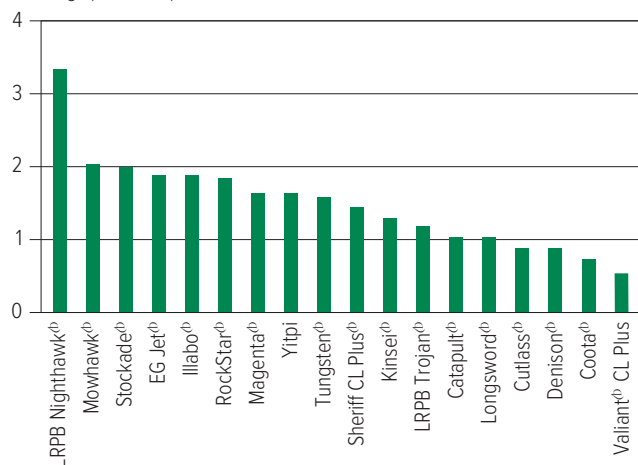
**Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from eight NVT sites in Kwinana East in 2023.**

Screenings (%<2.0mm)



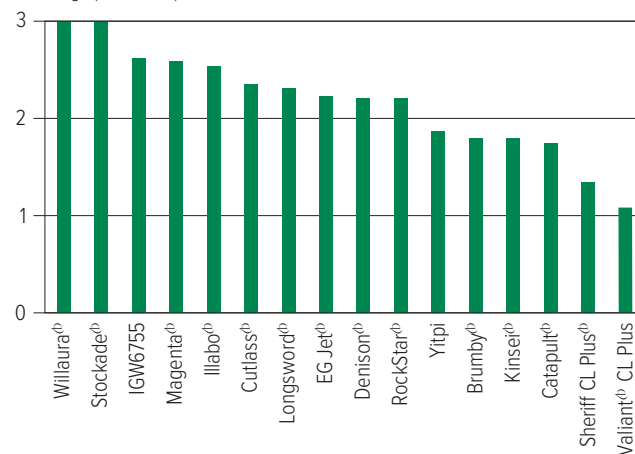
**Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2022.**

Screenings (%<2.0mm)



**Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2023.**

Screenings (%<2.0mm)



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## Wheat variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of wheat in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2024.

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

**Table 13: Wheat disease guide for Western Australia.**

| Variety                          | Yellow spot | Nodorum blotch (leaf) | Nodorum blotch (glume) | Stem rust | Stripe rust (west coast resistance) | Leaf rust | Powdery mildew | Septoria tritici blotch | RLN resistance ( <i>Pratylenchus neglectus</i> ) | RLN resistance ( <i>Pratylenchus quasitereoides</i> ) | CCN    | Crown rot |
|----------------------------------|-------------|-----------------------|------------------------|-----------|-------------------------------------|-----------|----------------|-------------------------|--|---|--------|-----------|
| Ballista <sup>db</sup>           | MS          | MS                    | MRMS                   | MR        | RMR                                 | S         | S              | SVS                     | S  |   | MRMS   | S         |
| Boree <sup>db</sup>              | MRMS        | MS                    | MRMS                   | MR        | MR                                  | S         | S              | S                       | S  |   | MSS    | S         |
| Borlaug 100 <sup>db</sup>        | MRMS        | MRMS                  | MRMS                   | MR        | RMR                                 | MR        | S              | MS                      | S  |   | MS     | MSS       |
| Brumby <sup>db</sup>             | MRMS        | MRMS                  | MS                     | MR        | RMR                                 | SVS       | R              | MSS (P)                 | MRMS   | MS (P)  | MRMS   | S         |
| Calibre <sup>db</sup>            | MRMS        | MSS                   | MSS                    | MR        | RMR                                 | S         | MSS            | S                       | S  | MRMS (P)  | MRMS   | S         |
| Catapult <sup>db</sup>           | MRMS        | MRMS                  | MS                     | MR        | RMR                                 | S         | S              | MSS                     | S  | MRMS  | R      | MSS       |
| Chief CL Plus <sup>db</sup>      | MRMS        | MS                    | MRMS                   | MR        | S                                   | MR        | S              | MSS                     | MRMS   | MRMS  | MS     | MSS       |
| Coota <sup>db</sup>              | MSS         | MRMS                  | MS                     | RMR       | RMR                                 | MR        | S              | MSS                     | MR   |   | MR     | MSS       |
| Cutlass <sup>db</sup>            | MSS         | MRMS                  | MRMS                   | R         | R                                   | RMR       | S              | MSS                     | MSS  | MS  | MR     | S         |
| Denison <sup>db</sup>            | MRMS        | MR                    | MRMS                   | MS        | MRMS                                | S         | S              | MS                      | S  | MRMS (P)  | MS     | MSS       |
| Devil <sup>db</sup>              | MRMS        | MRMS                  | MS                     | S         | MR                                  | SVS       | SVS            | SVS                     | MSS  | MRMS  | MSS    | MSS       |
| Dozer <sup>db</sup> CL Plus      | MS          | MRMS (P)              | MSS (P)                | MS        | MRMS                                | MSS       | MSS (P)        | MSS (P)                 | MRMS   |   | MS (P) | S         |
| DS Bennett <sup>db</sup>         | MRMS        | MRMS                  | MR                     | MS        | RMR                                 | SVS       | RMR            | MR                      | S  |   | S      | VS        |
| DS Pascal <sup>db</sup>          | MS          | MRMS                  | MRMS                   | MSS       | RMR                                 | MRMS#     | RMR            | MS                      | S  |   | S      | S         |
| EG Jet <sup>db</sup>             | MRMS        | MSS                   |                        | S         | RMR                                 | S         | MS             | MSS                     | S  |   | MRMS   | S         |
| EG Titanium                      | MSS         | MRMS                  |                        | MS        | RMR                                 | MS        | MSS            | MSS                     | MSS  |   | R      | MSS       |
| EGA Wedgetail <sup>db</sup>      | MSS         | MRMS                  | MRMS                   | MRMS      | MRMS                                | MSS       | MRMS           | MRMS                    | S  |   | S      | S         |
| Emu Rock <sup>db</sup>           | MS          | S                     | MS                     | MS        | MRMS                                | SVS       | MSS            | S                       | MSS  | MS (P)  | S      | MSS       |
| Firefly <sup>db</sup>            | MRMS        | MRMS (P)              | MSS (P)                | S         | MS                                  | MSS       | MSS (P)        | MSS (P)                 | MS   |   | S (P)  | S         |
| Genie <sup>db</sup>              | MRMS (P)    |                       |                        | MS (P)    | MR (P)                              | S (P)     |                |                         |  |   |        |           |
| Hammer CL Plus <sup>db</sup>     | MRMS        | MRMS                  | MRMS                   | MR        | RMR                                 | S         | S              | MSS                     | MSS  | MS (P)  | MRMS   | MSS       |
| IGW6755                          | MRMS        | MRMS                  | MR                     | MRMS      | MRMS                                | MS        | S              | MRMS                    | MSS  |   | MSS    | S         |
| Illabo <sup>db</sup>             | MS          | MR                    | MR                     | MRMS      | RMR                                 | S         | R              | MR                      | MSS  | RMR   | MRMS   | S         |
| Jillaroo <sup>db</sup>           | MS          | MS                    | MS                     | MS        | MR                                  | S         | S              | MRMS (P)                | S  |   | MS     | S         |
| Kinsei <sup>db</sup>             | MS          | MRMS                  | MRMS                   | MSS       | MRMS                                | MSS       | S              | MS                      | S  | S   | MSS    | MSS       |
| Longsword <sup>db</sup>          | MRMS        | MRMS                  | MRMS                   | MR        | RMR                                 | MS        | MS             | MRMS                    | MRMS   |   | MRMS   | MSS       |
| LRPB Anvil <sup>db</sup> CL Plus | MSS         | MSS                   | MSS                    | MR        | RMR                                 | SVS       | MSS            | SVS                     | MSS  | S (P)   | MS     | MSS       |
| LRPB Avenger <sup>db</sup>       | MS          | MSS                   | MS                     | MS        | MRMS                                | S         | S              | S                       | MSS  | MS (P)  | MRMS   | S         |
| LRPB Havoc <sup>db</sup>         | MRMS        | MS                    | MS                     | S         | MR                                  | S         | MS             | MRMS                    | S  | MRMS  | S      | MSS       |
| LRPB Kittyhawk <sup>db</sup>     | MRMS        | MR (P)                |                        | MRMS (S)  | RMR                                 | MR        | MRMS           | MR                      | S  |   | S      | SVS       |
| LRPB Matador <sup>db</sup>       | MRMS        | MRMS (P)              | MSS (P)                | MS        | RMR                                 | MSS       | MS (P)         | MSS (P)                 | S  |   | MS (P) | S         |
| LRPB Nighthawk <sup>db</sup>     | MS          | MRMS                  | MRMS                   | RMR       | RMR                                 | MSS       | MSS            | MR                      | MSS  | MRMS (P)  | MS     | MSS       |
| LRPB Nyala <sup>db</sup>         | MS          | MSS                   | MR                     | SVS       | RMR                                 | S         | R              | SVS                     | S  |   | MSS    | MSS       |
| LRPB Oryx <sup>db</sup>          | MSS         | S                     | MSS                    | MR        | RMR                                 | RMR#      | RMR            | SVS                     | MSS  | MSS (P)   | S      | MSS       |
| LRPB Trojan <sup>db</sup>        | MSS         | MS                    | MS                     | MRMS      | MR                                  | MR#       | S              | S                       | MSS  | MS (P)  | MS     | MS        |
| Mace <sup>db</sup>               | MRMS        | MS                    | MS                     | MRMS      | RMR                                 | S         | MSS            | S                       | MS   | MRMS  | MRMS   | S         |
| Magenta <sup>db</sup>            | MRMS        | MRMS                  | MS                     | MR        | MS                                  | RMR       | MRMS           | MS                      | MSS  | MSS   | S      | MSS       |
| Ninja <sup>db</sup>              | MRMS        | MRMS                  | MS                     | S         | MS                                  | S         | S              | MSS                     | S  | S   | MS     | S         |
| Razor CL Plus <sup>db</sup>      | MSS         | MS                    | MS                     | MRMS      | RMR                                 | S         | MSS            | SVS                     | S  |   | MR     | S         |
| RGT Accroc <sup>db</sup>         | MRMS        |                       |                        | MS        | RMR                                 | SVS       | RMR (P)        | MRMS                    | MS   |   | S      | SVS       |
| RGT Zanzibar                     | MS          | MR                    |                        | VS        | RMR                                 | SVS       | R              | MR                      | S  |   | MSS    | S         |

Continued on next page

Table 13: Wheat disease guide for Western Australia (continued).

| Variety                        | Yellow spot | Nodorum blotch (leaf) | Nodorum blotch (glume) | Stem rust | Stripe rust (west coast resistance) | Leaf rust | Powdery mildew | <i>Septoria tritici</i> blotch | RLN resistance ( <i>Pratylenchus neglectus</i> ) | RLN resistance ( <i>Pratylenchus quasitereoides</i> ) | CCN      | Crown rot |
|--------------------------------|-------------|-----------------------|------------------------|-----------|-------------------------------------|-----------|----------------|--------------------------------|--|---|----------|-----------|
| RockStar <sup>db</sup>         | MRMS        | MRMS                  | MRMS                   | MRMS      | RMR                                 | S         | MSS            | S                              | MRMS   | MS  | MSS      | S         |
| Scepter <sup>db</sup>          | MRMS        | MRMS                  | MSS                    | MRMS      | RMR                                 | MSS       | S              | S                              | S  | MS  | MRMS     | MSS       |
| Severn <sup>db</sup>           | MRMS        | MR                    | MR (P)                 | MS        | R                                   | MRMS      | R              | MS (P)                         | S  |   | MSS (P)  | S         |
| Sheriff CL Plus <sup>db</sup>  | MRMS        | MRMS                  | MRMS                   | MS        | MRMS                                | SVS       | SVS            | S                              | MRMS   | MRMS  | MS       | S         |
| Sting <sup>db</sup>            | MRMS        | MS                    | MS                     | MRMS      | MRMS                                | SVS       | MSS            | S                              | MS   | MSS (P)   | MS       | MSS       |
| Stockade <sup>db</sup>         | MRMS        | MRMS                  | MR                     | MS        | RMR                                 | MR        | SVS            | MS                             | S  |   | MRMS     | S         |
| Supreme <sup>db</sup>          | MS          | S                     |                        | MRMS      | RMR                                 | MR        | MS             | MSS                            | MSS  |   | S        | MSS       |
| Thumper <sup>db</sup>          | MS (P)      |                       |                        | MS (P)    | MR (P)                              | S (P)     |                |                                |  |   |          |           |
| Tomahawk CL Plus <sup>db</sup> | MRMS        | MRMS (P)              | S (P)                  | MR        | RMR                                 | S         | S (P)          | MSS (P)                        | S  |   | MRMS (P) | S         |
| Valiant <sup>db</sup> CL Plus  | MRMS        | MR                    | MRMS                   | MR        | R                                   | S         | SVS            | MRMS                           | S  | MSS (P)   | MSS (P)  | MSS       |
| Vixen <sup>db</sup>            | MRMS        | MS                    | MSS                    | MRMS      | MRMS                                | SVS       | SVS            | MSS                            | MRMS   | MSS (P)   | MSS      | S         |
| Wedin                          | MSS (P)     | MSS                   |                        | RMR       |                                     | MSS (P)   | S              | MR                             | MSS  |   |          |           |
| Willaura <sup>db</sup>         | MS          | MRMS                  | MS                     | MR        | R                                   | MRMS      | SVS            | MRMS                           | MSS  |   | MS       | S         |
| Yitpi                          | SVS         | MS                    | MRMS                   | S         | MRMS                                | S         | MS             | MS                             | MSS  | MS  | MR       | S         |
| Zen <sup>db</sup>              | MRMS        | MS                    | MRMS                   | S         | MR                                  | S         | S              | S                              | MRMS   | MRMS  | S        | S         |

Learn more via the [NVT Disease Ratings](#).

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating, # warning, may be more susceptible to alternate pathotypes, ( ) show outlier.

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# BARLEY

## New barley varieties

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

| Variety                | Breeding company   | Grain classification  | End point royalty* (\$) | Comments supplied by breeding company <sup>1</sup>  |
|------------------------|--------------------|-----------------------|-------------------------|---|
| Neo <sup>®</sup> CL    | InterGrain         | Under malt evaluation | 4.25                    | Neo <sup>®</sup> CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to medium-high rainfall environments. Neo <sup>®</sup> CL provides an outstanding disease resistance profile with excellent resistance to cereal cyst nematode, powdery mildew and the spot form of net blotch, and useful resistance to the net form of net blotch and leaf scald. Neo <sup>®</sup> CL has a semi-prostrate early growth habit, medium plant height, good tolerance to lodging, good grain retention and tolerance to head loss, and very good levels of grain plumpness. Neo <sup>®</sup> CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025. |
| Spinnaker <sup>®</sup> | Secobra Recherches |                       | TBC                     | Released under code name SCA21-Y003.  |

\* EPR amount is ex-GST, <sup>®</sup> denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)

## Barley variety yield performance – Kwinana East

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: Bencubbin main season barley.**

| Year                         | 2019     | 2020   | 2021              | 2022  | 2023              |
|------------------------------|----------|--------|-------------------|-------|-------------------|
| Mean yield (t/ha)            |          | 2.37   |                   | 5.34  |                   |
| Cyclops <sup>db</sup>        | No trial | 105    | Compromised trial | 106   | Compromised trial |
| Combat <sup>db</sup>         |          |        |                   | 105   |                   |
| Laperouse <sup>db</sup>      |          | 103    |                   | 104   |                   |
| Beast <sup>db</sup>          |          | 110    |                   | 100   |                   |
| Minotaur <sup>db</sup>       |          | 103    |                   | 103   |                   |
| Leabrook <sup>db</sup>       |          | 103    |                   | 103   |                   |
| Maximus <sup>db</sup> CL*    |          | 111    |                   | 99    |                   |
| Titan AX <sup>db</sup> *     |          |        |                   | 104   |                   |
| Rosalind <sup>db</sup>       |          | 111    |                   | 98    |                   |
| Spinnaker <sup>db</sup>      |          |        |                   | 101   |                   |
| Compass <sup>db</sup>        |          | 106    |                   | 98    |                   |
| RGT Planet <sup>db</sup>     |          | 94     |                   | 103   |                   |
| Spartacus CL <sup>db</sup> * |          | 108    |                   | 96    |                   |
| Zena <sup>db</sup> CL*       |          |        |                   | 102   |                   |
| La Trobe <sup>db</sup>       |          | 107    |                   | 96    |                   |
| Sowing date                  |          | 14 May | 14 May            | 6 May | 31 May            |
| Rainfall J–M (mm)            |          | 96     | 146               | 97    | 45                |
| Rainfall A–O (mm)            |          | 149    | 225               | 268   | 113               |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

**Table 2: Kalannie main season barley.**

| Year                       | 2019     | 2020   | 2021   | 2022   | 2023              |
|----------------------------|----------|--------|--------|--------|-------------------|
| Mean yield (t/ha)          |          | 2.71   | 3.05   | 5.74   |                   |
| Combat <sup>db</sup>       | No trial |        | 114    | 108    | Compromised trial |
| Litmus <sup>db</sup>       |          | 121    | 105    | 104    |                   |
| Rosalind <sup>db</sup>     |          | 109    | 105    | 105    |                   |
| Compass <sup>db</sup>      |          | 102    | 115    | 101    |                   |
| Leabrook <sup>db</sup>     |          | 99     | 114    | 102    |                   |
| Buff <sup>db</sup>         |          | 107    | 103    | 104    |                   |
| Titan AX <sup>db</sup> *   |          |        |        | 102    |                   |
| Beast <sup>db</sup>        |          | 100    | 112    | 102    |                   |
| Spinnaker <sup>db</sup>    |          |        |        | 104    |                   |
| Fathom <sup>db</sup>       |          | 100    | 106    | 102    |                   |
| Zena <sup>db</sup> CL*     |          |        | 98     | 103    |                   |
| Minotaur <sup>db</sup>     |          | 100    | 102    | 103    |                   |
| Commodus <sup>db</sup> CL* |          | 100    | 107    | 100    |                   |
| Cyclops <sup>db</sup>      |          | 97     | 107    | 101    |                   |
| La Trobe <sup>db</sup>     |          | 104    | 102    | 100    |                   |
| Sowing date                |          | 26 May | 25 May | 17 May | 31 May            |
| Rainfall J–M (mm)          |          | 108    | 131    | 51     | 37                |
| Rainfall A–O (mm)          |          | 163    | 271    | 269    | 121               |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

**Table 3: Kellerberrin main season barley.**

| Year                         | 2019     | 2020   | 2021   | 2022   | 2023   |
|------------------------------|----------|--------|--------|--------|--------|
| Mean yield (t/ha)            |          | 1.86   | 4.66   | 5.09   | 2.49   |
| Beast <sup>db</sup>          | No trial | 123    | 110    | 104    | 123    |
| Combat <sup>db</sup>         |          |        | 109    | 111    | 109    |
| Cyclops <sup>db</sup>        |          | 107    | 114    | 108    | 112    |
| Leabrook <sup>db</sup>       |          | 109    | 103    | 108    | 118    |
| Maximus <sup>db</sup> CL*    |          | 117    | 116    | 95     | 109    |
| Compass <sup>db</sup>        |          | 117    | 99     | 103    | 124    |
| Rosalind <sup>db</sup>       |          | 121    | 105    | 102    | 109    |
| Neo <sup>db</sup> CL*        |          |        |        |        | 99     |
| Laperouse <sup>db</sup>      |          | 103    | 111    | 103    | 108    |
| Titan AX <sup>db</sup> *     |          |        |        | 110    | 112    |
| Minotaur <sup>db</sup>       |          | 107    | 108    | 104    | 101    |
| Fathom <sup>db</sup>         |          | 119    | 103    | 97     | 107    |
| Commodus <sup>db</sup> CL*   |          | 111    | 99     | 99     | 113    |
| La Trobe <sup>db</sup>       |          | 112    | 100    | 97     | 109    |
| Spartacus CL <sup>db</sup> * |          | 110    | 108    | 92     | 105    |
| Sowing date                  |          | 25 May | 19 May | 18 May | 31 May |
| Rainfall J–M (mm)            |          | 64     | 76     | 41     | 40     |
| Rainfall A–O (mm)            |          | 125    | 298    | 338    | 216    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

**Table 4: Merredin main season barley.**

| Year                         | 2019  | 2020   | 2021              | 2022   | 2023   |
|------------------------------|-------|--------|-------------------|--------|--------|
| Mean yield (t/ha)            | 0.80  | 2.27   |                   | 5.99   | 1.15   |
| Combat <sup>db</sup>         |       |        | Compromised trial | 118    | 110    |
| Rosalind <sup>db</sup>       | 119   | 117    |                   | 106    | 127    |
| Beast <sup>db</sup>          | 114   | 115    |                   | 102    | 133    |
| Fathom <sup>db</sup>         | 115   | 105    |                   | 108    | 114    |
| Maximus <sup>db</sup> CL*    | 102   | 121    |                   | 100    | 131    |
| Minotaur <sup>db</sup>       |       | 105    |                   | 107    | 105    |
| Compass <sup>db</sup>        | 121   | 107    |                   | 97     | 126    |
| Buff <sup>db</sup>           | 114   | 100    |                   | 105    | 101    |
| La Trobe <sup>db</sup>       | 114   | 111    |                   | 97     | 121    |
| Cyclops <sup>db</sup>        |       | 107    |                   | 102    | 114    |
| Neo <sup>db</sup> CL*        |       |        |                   |        | 96     |
| Spartacus CL <sup>db</sup> * | 103   | 116    |                   | 95     | 123    |
| Commodus <sup>db</sup> CL*   |       | 105    |                   | 97     | 117    |
| Leabrook <sup>db</sup>       | 107   | 101    |                   | 100    | 112    |
| Spinnaker <sup>db</sup>      |       |        |                   | 105    | 93     |
| Sowing date                  | 7 Jun | 13 May | 12 May            | 12 May | 31 May |
| Rainfall J–M (mm)            | 14    | 100    | 68                | 81     | 42     |
| Rainfall A–O (mm)            | 208   | 170    | 188               | 319    | 141    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT

BARLEY

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CANOLA

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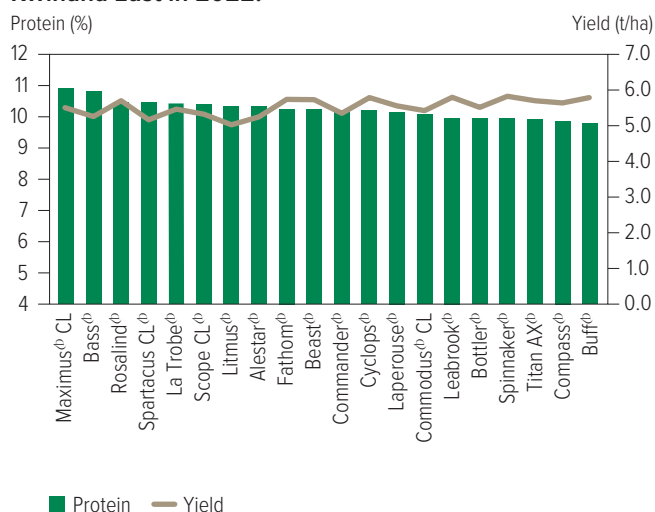
## Barley variety quality – Kwinana East

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.

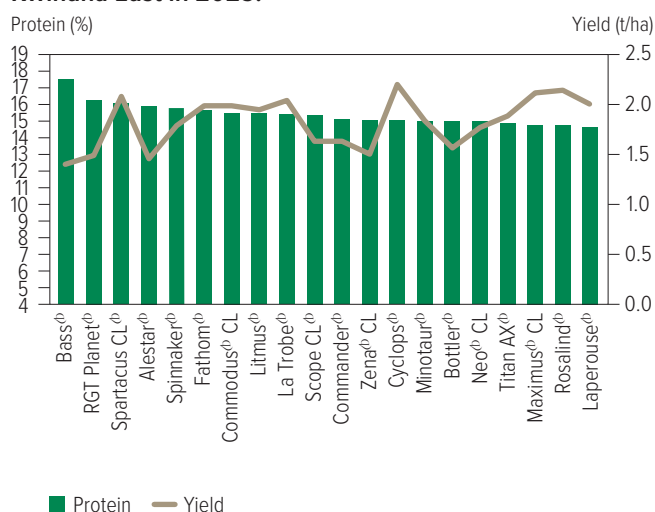
The following figures show the grain quality trends as histograms from 2022 and 2023 NVT averaged for trials in the Kwinana East region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

### Protein and yield comparisons

**Figure 1: Protein (%) and yield (t/ha) comparisons for main season barley varieties from four NVT sites in Kwinana East in 2022.**

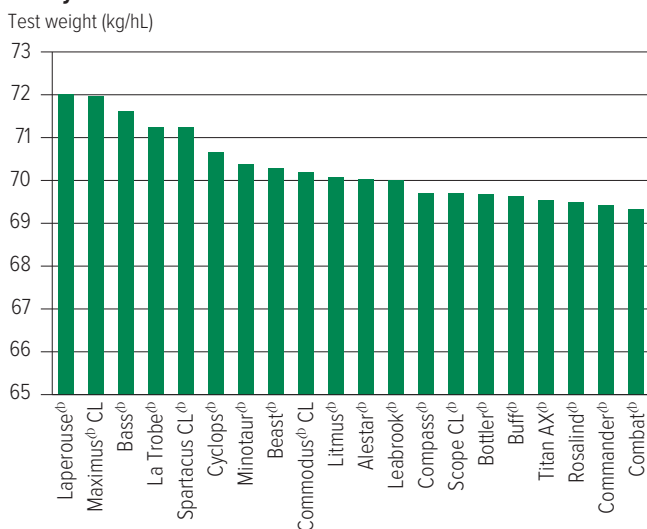


**Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.**

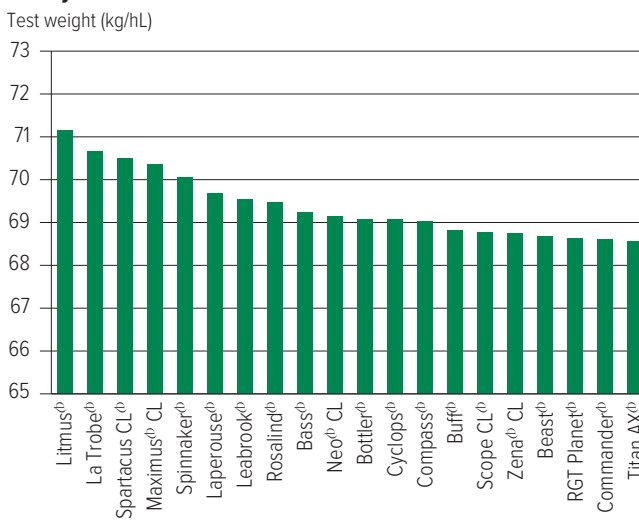


### Test weight comparisons

**Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from four NVT sites in Kwinana East in 2022.**



**Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.**



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Screenings comparisons

Figure 5: Screenings (<2.5mm) comparisons for main season barley varieties from four NVT sites in Kwinana East in 2022.

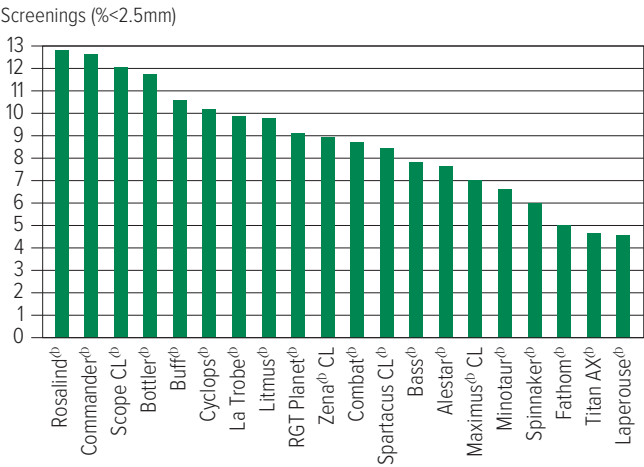
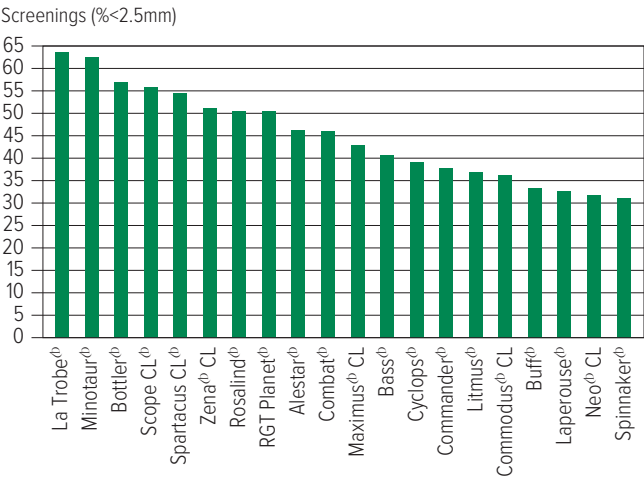


Figure 6: Screenings (<2.5mm) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.



Retention comparisons

Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from four NVT sites in Kwinana East in 2022.

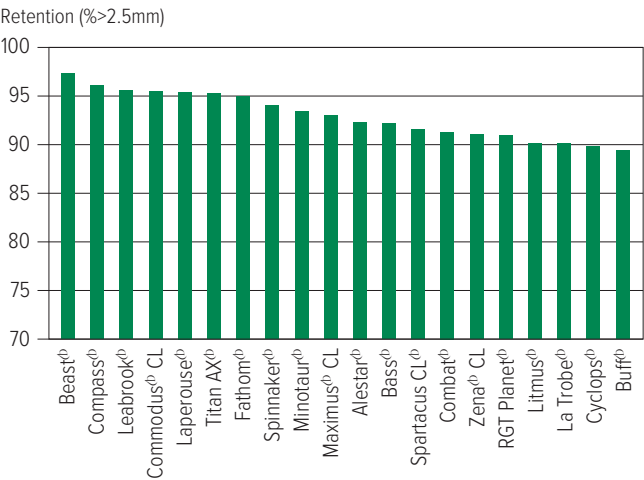
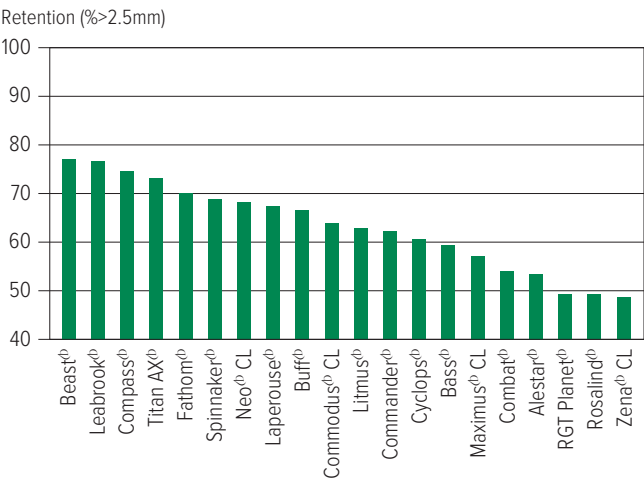


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.



## Barley variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of barley in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2024.

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

**Table 5: Barley disease guide for Western Australia.**

| Variety                    | Scald   | Net form net blotch* | Spot form net blotch | Powdery mildew | Leaf rust | Crown rot resistance | Barley yellow dwarf virus | RLN resistance<br>( <i>Pratylenchus neglectus</i> ) | RLN resistance<br>( <i>Pratylenchus quasitereoides</i> ) | CCN                | Ramularia |
|----------------------------|---------|----------------------|----------------------|----------------|-----------|----------------------|---------------------------|---|--|--------------------|-----------|
| Alestar <sup>db</sup>      | S       |                      | S                    | RMR            | MS        | S                    | MRMS                      | MR  |  | R <sup>a</sup> (P) | SVS       |
| Banks <sup>db</sup>        | SVS     |                      | MSS                  | MR-MS          | S         | MSS                  | MRMS                      | MS  | MSS  | S                  | VS        |
| Bass <sup>db</sup>         | MRMS-MS |                      | MSS                  | MSS            | SVS       | MSS                  | MRMS                      | MS  | MSS  | S                  | VS        |
| Beast <sup>db</sup>        | S       |                      | MSS                  | RMR            | S         | S                    | MSS                       | MRMS  | MSS  | MR                 | SVS       |
| Bottler <sup>db</sup>      | S       |                      | MSS                  | RMR            | MS        | SVS                  | MS                        | MS  |  |                    | SVS       |
| Buff <sup>db</sup>         | MS      |                      | S                    | MSS            | S         | S                    | MRMS                      | MRMS  | S  |                    | SVS       |
| Combat <sup>db</sup>       | S       |                      | MRMS                 | R              | MRMS      | S                    | MRMS-MS                   | MRMS  | S (P)  | MR                 | SVS       |
| Commander <sup>db</sup>    | MS      |                      | MSS                  | RMR            | MSS       | S                    | MRMS-MS                   | MRMS  |  | R                  | SVS       |
| Commodus <sup>db</sup> CL  | MSS     |                      | MSS                  | RMR            | S         | S                    | MRMS-MS                   | MRMS  | MS   | R                  | SVS       |
| Compass <sup>db</sup>      | MS      |                      | MSS                  | R              | S         | MSS                  | MSS                       | MRMS  | S  | R                  | SVS       |
| Cyclops <sup>db</sup>      | MRMS    |                      | MSS                  | R              | S         | MSS                  | S                         | MRMS  | MSS (P)  | S                  | SVS       |
| Fairview <sup>db</sup>     | S       |                      | MSS                  | R              | S         | MSS                  | MRMS                      | MR  |  |                    | SVS       |
| Fandaga <sup>db</sup>      | SVS     |                      | MSS                  | RMR            | MS        | MSS                  | MS                        | MR  | MS (P)   | R                  | VS        |
| Fathom <sup>db</sup>       | MR      |                      | MR                   | MR             | MS        | SVS                  | MS                        | MRMS  | MSS  | R                  | SVS       |
| Flinders <sup>db</sup>     | MSS     |                      | S                    | RMR            | MS        | MSS                  | MRMS-MS                   | MRMS  | MSS (P)  | S                  | SVS       |
| Keel                       | MS      |                      | MR                   | R-MRMS         | SVS       | S                    | MRMS-MS                   | MS  |  | R                  | SVS       |
| Kiwi                       | S       |                      | S                    | RMR            | MS        | MSS                  | MRMS-MS                   | MRMS  |  | S                  | VS        |
| La Trobe <sup>db</sup>     | MR      |                      | MSS                  | MS             | MSS       | S                    | S                         | MRMS  | S  | R                  | SVS       |
| Laperouse <sup>db</sup>    | S       |                      | MS                   | RMR            | MSS       | S                    | MRMS                      | MRMS  | MS   | S                  | VS        |
| Leabrook <sup>db</sup>     | MSS     |                      | MSS                  | RMR            | S         | S                    | MSS                       | MRMS  | MS   | RMR                | VS        |
| Litmus <sup>db</sup>       | S       |                      | S                    | R              | S         | S                    | S                         | MS  | MSS (P)  | MS                 | VS        |
| Maximus <sup>db</sup> CL   | MR      |                      | MSS                  | RMR/S          | MSS       | S                    | MRMS                      | MRMS  | S  | R                  | VS        |
| Minotaur <sup>db</sup>     | VS      |                      | S                    | S              | S         | MSS                  | S                         | MRMS  | MS (P)   | R                  | SVS       |
| Neo <sup>db</sup> CL       | MR (P)  |                      | MRMS (P)             | R (P)          | MSS (P)   |                      | MRMS (P)                  | RMR (P)   | S (P)  | R                  | SVS (P)   |
| RGT Planet <sup>db</sup>   | MR      |                      | S                    | R              | MRMS      | MSS                  | MRMS                      | MRMS  | MS   | R (P)              | SVS       |
| Rosalind <sup>db</sup>     | MSS     |                      | S                    | MSS            | MR        | S                    | MRMS-MS                   | MRMS  | MSS  | R                  | VS        |
| SakuraStar                 | MS      |                      | MS                   | RMR            | S         | S                    | MRMS                      | MR  | -  | R                  | SVS       |
| Scope CL <sup>db</sup>     | MS      |                      | MSS                  | RMR            | MSS       | S                    | MRMS                      | MRMS  | MRMS   | S                  | SVS       |
| Spartacus CL <sup>db</sup> | RMR     |                      | S                    | MS             | MSS       | S                    | S                         | MRMS  | MSS  | R                  | VS        |
| Spinnaker <sup>db</sup>    | MR      |                      | S                    | R              | MS        | S                    | MRMS                      | MR  | MS (P)   | S                  | VS        |
| Titan AX <sup>db</sup>     | S       |                      | MSS                  | RMR            | S         | S                    | MS                        | MR  | S (P)  | MR (P)             | VS        |
| Topstart                   | MSS     |                      | MSS                  | R              | MS        | MSS                  | MRMS                      | RMR   |  | S                  | SVS       |
| Urambie                    | RMR     |                      | MSS                  | MRMS-MSS       | MSS       | MSS                  | MRMS                      | MRMS  |  |                    | VS        |
| Westminster <sup>db</sup>  | MR      |                      | MSS                  | RMR            | MRMS      | MSS                  | MRMS-MS                   | MRMS  |  |                    | SVS       |
| Yeti <sup>db</sup>         | SVS     |                      | MS                   | MR             | S         | S                    | MS                        | MR  |  | RMR                | VS        |
| Zena <sup>db</sup> CL      | MR      |                      | S                    | R              | MS        | S                    | MRMS-MS                   | MRMS  | MS (P)   | R                  | VS        |

\* ratings will be updated when available. Learn more via the [NVT Disease Ratings](#).

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

T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant,

(P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, ^ line contains a few susceptible off types.

WHEAT

BARLEY

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# OAT

## New oat varieties

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

| Variety                | Breeding company | End point royalty* (\$) | Comments supplied by breeding company <sup>1</sup> |
|------------------------|------------------|-------------------------|--|
| Archer <sup>db</sup>   | InterGrain       | TBC                     | Variety description not supplied.                  |
| Kingbale <sup>db</sup> | InterGrain       | TBC                     | Variety description not supplied.                  |
| Kultarr <sup>db</sup>  | InterGrain       | TBC                     | Variety description not supplied.                  |
| Wallaby <sup>db</sup>  | InterGrain       | TBC                     | Variety description not supplied.                  |

\* EPR amount is ex-GST, <sup>db</sup> denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)



## Oat variety yield performance – Kwinana East

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: Merredin oat.**

| Year                    | 2019  | 2020   | 2021   | 2022   | 2023   |
|-------------------------|-------|--------|--------|--------|--------|
| Mean yield (t/ha)       | 1.08  | 1.16   | 3.57   | 4.49   | 1.13   |
| 13008-18                |       |        | 110    | 118    | 116    |
| Wandering               | 117   | 117    | 103    | 111    | 108    |
| Bilby <sup>db</sup>     | 104   | 141    | 98     | 109    | 111    |
| Bannister <sup>db</sup> | 106   | 90     | 109    | 112    | 97     |
| Koala <sup>db</sup>     | 97    | 40     | 116    | 113    | 80     |
| Williams <sup>db</sup>  | 116   | 88     | 97     | 100    | 101    |
| Archer <sup>db*</sup>   |       |        |        |        | 93     |
| Wallaby <sup>db</sup>   |       |        |        |        | 71     |
| Kojonup <sup>db</sup>   | 79    | 60     | 92     | 104    | 76     |
| Durack <sup>db</sup>    | 98    | 118    | 89     | 77     | 110    |
| Sowing date             | 7 Jun | 13 May | 12 May | 12 May | 31 May |
| Rainfall J–M (mm)       | 14    | 100    | 68     | 81     | 42     |
| Rainfall A–O (mm)       | 208   | 170    | 188    | 319    | 141    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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BARLEY

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## Oat variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of oat in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2024.

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

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

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

\* ratings will be updated when available. Learn more via the [NVT Disease Ratings](#).

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

(P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes.

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# CANOLA

## New canola varieties

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

| Variety                 | Breeding company         | End point royalty* (\$) | Comments supplied by breeding company <sup>1</sup>   |
|-------------------------|--------------------------|-------------------------|--|
| DG Avon TT <sup>Ⓛ</sup> | Nutrien Ag Solutions Ltd | TBC                     | Early, determinant, short TT open pollinated variety suited to low-medium rainfall zones.  |
| Hyola® Continuum CL     | Advanta Seeds            | N/A                     | An early-mid maturity Clearfield® hybrid, Continuum CL provides wide environmental adaptability with excellent grain oil potential. It exhibits strong yields in target environments and demonstrates excellent adaptability to growing regions with a range of 1.0–5.5 t/ha. Continuum CL showcases an exceptionally high level of early plant vigour, high lodging resistance, and an outstanding blackleg rating of 'R' due to its distinctive tri-group resistance, ADF. |
| Hyola® Defender CT      | Advanta Seeds            | N/A                     | A mid-season maturity CT hybrid, Defender CT delivers remarkable grain yield, robust plant vigour and a very high grain oil content. Defender CT performance is closely aligned with the renowned Hyola® Blazer TT variety. Defender CT offers uniform flowering, manageable height for direct harvesting and an exceptional blackleg rating of 'R' due to its distinctive tri-group resistance, ADF.  |
| InVigor® LR 4540P       | BASF Australia Ltd       | N/A                     | New LibertyLink® hybrid with tolerance to both Liberty® and TruFlex®. Combines two herbicide tolerances with the flexibility of PodGuard® for shatter tolerance. Early-mid maturing variety suited to low and medium-rainfall zones. Marketed by BASF.   |
| Nuseed® Ceres IMI       | Nuseed                   | N/A                     | Nuseed® Ceres IMI is Nuseed®'s first release in this popular herbicide technology. It has demonstrated competitive yield and excellent oil during trials, and exhibits strong early vigour and good early biomass. Suited to quick canola growing regions, Nuseed® Ceres IMI comes with good blackleg resistance and harvestability.   |
| PY323G                  | Pioneer Hi-Bred Aust     |                         | Variety description not supplied.  |
| PY421C                  | Pioneer Hi-Bred Aust     |                         | Variety description not supplied.  |
| PY422G                  | Pioneer Hi-Bred Aust     |                         | Variety description not supplied.  |
| PY424GC                 | Pioneer Hi-Bred Aust     |                         | Variety description not supplied.  |

\* EPR amount is ex-GST, <sup>Ⓛ</sup> denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)

## Canola variety yield performance – Kwinana East

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: Bencubbin low-med rainfall GLY.**

| Year                | 2019     | 2020  | 2021  | 2022   | 2023         |
|---------------------|----------|-------|-------|--------|--------------|
| Mean yield (t/ha)   |          | 1.75  | 2.24  | 3.10   |              |
| Nuseed® Emu TF      | No trial | 122   | 115   | 106    | Trial failed |
| Nuseed® Hunter TF   |          |       | 109   | 109    |              |
| Pioneer® 44Y27 (RR) |          | 106   | 110   | 107    |              |
| InVigor® LR 4540P   |          |       |       | 107    |              |
| InVigor® R 4022P    |          | 100   | 100   | 101    |              |
| Hyola® Battalion XC |          | 100   | 104   | 98     |              |
| Pioneer® 44Y30 RR   |          |       | 99    | 102    |              |
| InVigor® R 4520P    |          | 97    | 96    | 103    |              |
| DG Lofty TF         |          |       | 100   | 96     |              |
| Hyola® Garrison XC  |          | 97    |       | 93     |              |
| Sowing date         |          | 8 May | 4 May | 20 Apr | 31 May       |
| Rainfall J–M (mm)   |          | 96    | 140   | 102    | 45           |
| Rainfall A–O (mm)   |          | 149   | 230   | 284    | 113          |

Special thanks to 2023 trial cooperator.

Learn more via the [NVT Long Term Yield Reporter](#)

**Table 2: Kellerberrin low-med rainfall GLY.**

| Year                | 2019              | 2020   | 2021   | 2022   | 2023   |
|---------------------|-------------------|--------|--------|--------|--------|
| Mean yield (t/ha)   |                   | 1.42   | 2.50   | 2.47   | 2.26   |
| Nuseed® Emu TF      | Compromised trial | 129    | 110    | 113    | 106    |
| PY424GC             |                   |        |        |        | 104    |
| Nuseed® Hunter TF   |                   |        | 109    | 112    | 105    |
| Pioneer® 44Y27 (RR) |                   | 111    | 107    | 110    | 102    |
| PY323G              |                   |        |        |        | 104    |
| InVigor® LR 4540P   |                   |        |        | 108    | 98     |
| Hyola® Regiment XC  |                   |        | 101    |        | 104    |
| Hyola® Battalion XC |                   | 104    | 100    | 99     | 99     |
| Pioneer® 44Y30 RR   |                   |        | 101    | 101    | 100    |
| InVigor® R 4022P    |                   | 100    | 100    | 101    | 96     |
| Sowing date         | 7 Jun             | 25 May | 10 May | 12 May | 17 Apr |
| Rainfall J–M (mm)   | 7                 | 64     | 79     | 41     | 40     |
| Rainfall A–O (mm)   | 216               | 157    | 311    | 338    | 184    |

Special thanks to 2023 trial cooperator, Brad Jones.

Learn more via the [NVT Long Term Yield Reporter](#)

**Table 3: Merredin low-med rainfall GLY.**

| Year                | 2019  | 2020  | 2021  | 2022  | 2023   |
|---------------------|-------|-------|-------|-------|--------|
| Mean yield (t/ha)   | 0.61  | 1.02  | 1.37  | 2.55  | 1.49   |
| Nuseed® Emu TF      |       | 137   | 120   | 112   | 113    |
| PY323G              |       |       |       |       | 108    |
| Nuseed® Hunter TF   |       |       |       | 110   | 106    |
| Pioneer® 44Y27 (RR) | 103   | 109   | 109   | 109   | 100    |
| PY424GC             |       |       |       |       | 100    |
| InVigor® LR 4540P   |       |       |       | 104   | 103    |
| InVigor® R 4022P    | 102   | 98    | 107   | 99    | 99     |
| Hyola® Battalion XC |       | 111   | 99    | 102   | 94     |
| Hyola® Regiment XC  |       |       | 97    |       | 104    |
| InVigor® R 4520P    | 101   | 85    | 109   | 96    | 101    |
| Sowing date         | 7 Jun | 6 May | 8 May | 4 May | 31 May |
| Rainfall J–M (mm)   | 14    | 79    | 82    | 84    | 51     |
| Rainfall A–O (mm)   | 208   | 153   | 245   | 320   | 141    |

Special thanks to 2023 trial cooperator.

Learn more via the [NVT Long Term Yield Reporter](#)

**Table 4: Merredin low-med rainfall IMI.**

| Year                | 2019  | 2020  | 2021  | 2022  | 2023   |
|---------------------|-------|-------|-------|-------|--------|
| Mean yield (t/ha)   | 0.62  | 1.11  | 1.35  | 2.77  | 1.45   |
| Nuseed® Ceres IMI   |       |       |       |       | 108    |
| Hyola® Equinox CL   |       |       |       | 101   |        |
| Pioneer® 44Y90 (CL) | 99    | 94    |       |       |        |
| Pioneer® 44Y94 CL   |       |       | 100   | 101   | 103    |
| PY421C              |       |       |       |       | 106    |
| Hyola® Solstice CL  |       |       | 81    |       | 111    |
| VICTORY® V7002CL    | 100   |       |       |       |        |
| Pioneer® 43Y92 (CL) | 98    | 95    | 92    | 98    | 100    |
| Hyola® Continuum CL |       |       |       | 94    | 102    |
| Hyola® 575CL        | 92    |       |       |       |        |
| Sowing date         | 7 Jun | 6 May | 8 May | 4 May | 31 May |
| Rainfall J–M (mm)   | 14    | 79    | 82    | 84    | 51     |
| Rainfall A–O (mm)   | 208   | 153   | 245   | 320   | 141    |

Special thanks to 2023 trial cooperator.

Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties have not been included in this trial, but have been tested in other herbicide trials at this location: Hyola® Battalion XC, Hyola® Defender CT, Hyola® Enforcer CT, Hyola® Garrison XC and Hyola® Regiment XC.

Learn more via the [NVT Long Term Yield Reporter](#)

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Table 5: Bencubbin low-med rainfall TT.

| Year                   | 2019     | 2020  | 2021  | 2022   | 2023         |
|------------------------|----------|-------|-------|--------|--------------|
| Mean yield (t/ha)      |          | 1.68  | 1.97  | 2.69   |              |
| HyTTec® Velocity       | No trial |       |       | 114    | Trial failed |
| HyTTec® Trident        |          | 115   | 121   | 117    |              |
| InVigor® T 4510        |          | 108   | 114   | 111    |              |
| HyTTec® Trophy         |          |       |       | 110    |              |
| InVigor® T 4511        |          |       | 107   | 106    |              |
| SF Spark TT            |          | 106   | 106   | 103    |              |
| DG Avon TT             |          |       |       | 100    |              |
| InVigor® LT 4530P      |          | 97    | 105   | 108    |              |
| Bandit TT <sup>Ⓢ</sup> |          |       | 105   | 101    |              |
| Hyola® Blazer TT       |          | 99    |       | 105    |              |
| Sowing date            |          | 8 May | 4 May | 20 Apr | 31 May       |
| Rainfall J–M (mm)      |          | 96    | 140   | 102    | 45           |
| Rainfall A–O (mm)      |          | 149   | 230   | 284    | 113          |

Special thanks to 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

Table 6: Kellerberrin low-med rainfall TT.

| Year                   | 2019         | 2020   | 2021   | 2022   | 2023   |
|------------------------|--------------|--------|--------|--------|--------|
| Mean yield (t/ha)      |              | 1.05   | 2.02   | 1.99   | 1.47   |
| HyTTec® Velocity       | Trial failed |        |        | 124    | 117    |
| HyTTec® Trident        |              | 127    | 120    | 127    | 116    |
| InVigor® T 4510        |              | 116    | 112    | 117    | 105    |
| InVigor® T 4511        |              |        | 107    | 110    | 109    |
| SF Spark TT            |              | 111    | 105    | 106    | 105    |
| DG Avon TT             |              |        |        | 103    | 99     |
| Hyola® Blazer TT       |              | 95     |        | 105    | 104    |
| Bandit TT <sup>Ⓢ</sup> |              |        | 102    | 103    | 99     |
| InVigor® LT 4530P      |              | 96     | 105    | 109    | 93     |
| Hyola® Enforcer CT     |              | 90     |        | 100    | 110    |
| Sowing date            | 7 Jun        | 25 May | 10 May | 12 May | 31 May |
| Rainfall J–M (mm)      | 7            | 64     | 79     | 41     | 40     |
| Rainfall A–O (mm)      | 216          | 157    | 311    | 338    | 184    |

Special thanks to 2023 trial cooperator, Brad Jones.  
Learn more via the [NVT Long Term Yield Reporter](#)

Table 7: Merredin low-med rainfall TT.

| Year                   | 2019  | 2020  | 2021  | 2022  | 2023   |
|------------------------|-------|-------|-------|-------|--------|
| Mean yield (t/ha)      | 0.63  | 1.05  | 1.53  | 2.43  | 1.32   |
| HyTTec® Velocity       |       | 126   |       | 117   | 118    |
| HyTTec® Trident        | 113   | 114   | 112   | 120   | 112    |
| InVigor® T 4510        | 107   | 108   | 111   | 112   | 105    |
| DG Avon TT             |       |       |       | 105   | 98     |
| SF Spark TT            | 104   | 109   | 103   | 105   | 103    |
| InVigor® T 4511        |       |       | 100   | 107   | 104    |
| Bandit TT <sup>Ⓢ</sup> |       |       | 103   | 103   | 98     |
| InVigor® LT 4530P      |       | 93    | 108   | 104   | 97     |
| Hyola® Blazer TT       |       | 86    |       | 100   | 107    |
| Hyola® Enforcer CT     | 99    | 89    |       | 99    | 105    |
| Sowing date            | 7 Jun | 6 May | 8 May | 4 May | 31 May |
| Rainfall J–M (mm)      | 14    | 79    | 82    | 84    | 51     |
| Rainfall A–O (mm)      | 208   | 153   | 245   | 320   | 141    |

Special thanks to 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

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## 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 2024.

Varieties are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**Table 8: Canola disease guide – autumn 2024 ratings.**

[illegible]

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 8: Canola disease guide – autumn 2024 ratings (continued).

[illegible]

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 – Kwinana East

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: Merredin desi chickpea.**

| Year                     | 2019  | 2020   | 2021   | 2022   | 2023   |
|--------------------------|-------|--------|--------|--------|--------|
| Mean yield (t/ha)        | 0.91  | 1.31   | 0.69   | 0.66   | 0.60   |
| CBA Captain <sup>Ⓛ</sup> | 111   | 112    | 104    | 108    | 114    |
| PBA Slasher <sup>Ⓛ</sup> | 108   | 103    | 99     | 96     | 107    |
| PBA Striker <sup>Ⓛ</sup> | 108   | 101    | 92     | 94     | 112    |
| Neelam <sup>Ⓛ</sup>      | 97    | 97     | 97     | 98     | 100    |
| PBA Maiden <sup>Ⓛ</sup>  | 100   | 95     | 88     | 93     | 102    |
| Genesis™ 836             | 90    | 93     | 98     | 98     | 90     |
| PBA Seamer <sup>Ⓛ</sup>  |       |        |        | 87     |        |
| Genesis™ 090             | 53    | 69     | 91     | 95     |        |
| Sowing date              | 7 Jun | 18 May | 31 May | 25 May | 31 May |
| Rainfall J–M (mm)        | 14    | 90     | 65     | 65     | 62     |
| Rainfall A–O (mm)        | 208   | 193    | 251    | 304    | 134    |

Special thanks to 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](https://nvt.grdc.com.au/resources/crop-sowing-guides)

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Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](https://nvt.grdc.com.au/resources/crop-sowing-guides)

# Chickpea variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of chickpea in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2024.

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

| Table 2: Chickpea disease guide for Western Australia. |   |                        |   |  |
|--|---|------------------------|---|--|
| Variety  | Ascochyta blight (pathogen group 2 – north) | Phytophthora root rot* | RLN resistance ( <i>Pratylenchus neglectus</i> )* | RLN tolerance ( <i>Pratylenchus neglectus</i> )* |
| DESI   |   |                        |   |  |
| CBA Captain <sup>Ⓛ</sup>                               | MS  |                        |   |  |
| Genesis <sup>™</sup> 836                               | S   |                        |   |  |
| Kyabra <sup>Ⓛ</sup>                                    | VS  |                        |   |  |
| Neelam <sup>Ⓛ</sup>                                    | S   |                        |   |  |
| PBA Boundary <sup>Ⓛ</sup>                              | S   |                        |   |  |
| PBA Drummond <sup>Ⓛ</sup>                              | VS  |                        |   |  |
| PBA HatTrick <sup>Ⓛ</sup>                              | S   |                        |   |  |
| PBA Maiden <sup>Ⓛ</sup>                                | S   |                        |   |  |
| PBA Pistol <sup>Ⓛ</sup>                                | VS  |                        |   |  |
| PBA Seamer <sup>Ⓛ</sup>                                | MS  |                        |   |  |
| PBA Slasher <sup>Ⓛ</sup>                               | S   |                        |   |  |
| PBA Striker <sup>Ⓛ</sup>                               | S   |                        |   |  |
| KABULI   |   |                        |   |  |
| Almaz <sup>Ⓛ</sup>                                     | MS  |                        |   |  |
| Genesis <sup>™</sup> 090                               | MS  |                        |   |  |
| Genesis <sup>™</sup> Kalkee                            | S   |                        |   |  |
| PBA Magnus <sup>Ⓛ</sup>                                | MS  |                        |   |  |
| PBA Monarch <sup>Ⓛ</sup>                               | MS  |                        |   |  |
| PBA Royal <sup>Ⓛ</sup>                                 | MS  |                        |   |  |

\* ratings will be updated when available. Learn more via the [NVT Disease Ratings](#).  
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible,  
T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant.



# FIELD PEA

## New field pea varieties

The following information is for field pea varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to [nvt.grdc.com.au](http://nvt.grdc.com.au) to find trial results for any new varieties released since the publication of this harvest report.

| Variety                | Breeding company     | End point royalty* (\$) | Comments supplied by breeding company <sup>1</sup>   |
|------------------------|----------------------|-------------------------|--|
| APB Bondi <sup>Ⓛ</sup> | Agriculture Victoria | TBC                     | APB Bondi <sup>Ⓛ</sup> (tested as OZP1903) is a Kasper-type pea with mid-flowering and mid-maturity. APB Bondi <sup>Ⓛ</sup> combines a number of traits in a semi-leafless and semi-dwarf background. It is rated resistant to moderately resistant to downy mildew; resistant to powdery mildew, pea seed-borne mosaic virus and bean leaf roll virus; tolerant to boron toxicity and moderately tolerant to salinity. It has a high yield potential and wide adaptation. Seed is marketable as Kasper pea. |

\* EPR amount is ex-GST, <sup>Ⓛ</sup> denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)

## Field pea variety yield performance – Kwinana East

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: Merredin field pea.**

| Year                      | 2019   | 2020   | 2021   | 2022   | 2023   |
|---------------------------|--------|--------|--------|--------|--------|
| Mean yield (t/ha)         | 0.61   | 1.54   | 1.02   | 2.33   | 1.03   |
| APB Bondi <sup>Ⓛ</sup>    |        | 123    | 106    | 99     | 103    |
| PBA Taylor <sup>Ⓛ</sup>   | 138    | 109    | 98     | 104    | 104    |
| PBA Butler <sup>Ⓛ</sup>   | 127    | 106    | 103    | 103    | 102    |
| PBA Wharton <sup>Ⓛ</sup>  | 120    | 107    | 98     | 102    | 107    |
| PBA Twilight <sup>Ⓛ</sup> | 96     | 101    | 101    | 101    | 108    |
| PBA Oura <sup>Ⓛ</sup>     | 83     | 89     | 108    | 106    | 109    |
| PBA Gunyah <sup>Ⓛ</sup>   | 106    | 91     | 94     | 105    | 103    |
| Kaspa                     | 109    | 95     | 87     | 101    | 94     |
| GIA Ourstar <sup>Ⓛ*</sup> |        | 80     | 91     | 95     | 95     |
| GIA Kastar <sup>Ⓛ*</sup>  |        | 105    | 62     | 82     | 76     |
| Sowing date               | 7 June | 18 May | 31 May | 25 May | 31 May |
| Rainfall J–M (mm)         | 14     | 90     | 65     | 65     | 62     |
| Rainfall A–O (mm)         | 208    | 193    | 251    | 304    | 134    |

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

## Field pea variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of field pea in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2024.

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

**Table 2: Field pea disease guide for Western Australia.**

| Variety                   | Bacterial blight | Downy mildew | Powdery mildew | RLN resistance<br>( <i>Pratylenchus neglectus</i> )* | RLN resistance<br>( <i>Pratylenchus thornei</i> )* |
|---------------------------|------------------|--------------|----------------|--|--|
| APB Bondi <sup>Ⓛ</sup>    | S                | RMR (S)      | RMR            |  |  |
| GIA Kastar <sup>Ⓛ</sup>   | S                | S            | RMR            |  |  |
| GIA Ourstar <sup>Ⓛ</sup>  | S (P)            | S            | S              |  |  |
| Kaspa                     | S                | S            | S              |  |  |
| PBA Butler <sup>Ⓛ</sup>   | MS               | S            | S              |  |  |
| PBA Gunyah <sup>Ⓛ</sup>   | S                | S            | S              |  |  |
| PBA Noosa <sup>Ⓛ</sup>    | S                | MS           | S              |  |  |
| PBA Oura <sup>Ⓛ</sup>     | MS               | S            | S              |  |  |
| PBA Pearl                 | MS               | S            | S              |  |  |
| PBA Percy                 | MRMS             | S            | S              |  |  |
| PBA Taylor <sup>Ⓛ</sup>   | S                | S            | S              |  |  |
| PBA Twilight <sup>Ⓛ</sup> | S                | S            | S              |  |  |
| PBA Wharton <sup>Ⓛ</sup>  | S                | S            | RMR            |  |  |
| Sturt                     | MS               | S            | S              |  |  |

\* ratings will be updated when available. Learn more via the [NVT Disease Ratings](#).

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating, ( ) show outlier.

WHEAT

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LUPIN

# 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. Please go to [nvt.grdc.com.au](http://nvt.grdc.com.au) to find trial results for any new varieties released since the publication of this harvest report.

| Variety               | Breeding company              | End point royalty* (\$) | Comments supplied by breeding company <sup>1</sup>  |
|-----------------------|-------------------------------|-------------------------|---|
| Gidgee <sup>Ⓛ</sup>   | Australian Grain Technologies | TBC                     | A very high and stable yielding alternative to PBA Jurien <sup>Ⓛ</sup> and Mandelup <sup>Ⓛ</sup> . Widely adapted but particularly well adapted to the northern and central wheatbelt of WA. Metribuzin tolerant. Reduced risk of seed splitting compared with PBA Jurien <sup>Ⓛ</sup> . Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly quicker maturity relative to PBA Jurien <sup>Ⓛ</sup> , slightly slower than Mandelup <sup>Ⓛ</sup> .  |
| Rosemont <sup>Ⓛ</sup> | Australian Grain Technologies | TBC                     | A very high yielding alternative to PBA Jurien <sup>Ⓛ</sup> , Coyote <sup>Ⓛ</sup> and Mandelup <sup>Ⓛ</sup> . Best performance in softer finishing situations and southern WA environments. Unique white flower and faintly speckled seed. Metribuzin tolerant. Excellent early vigour. Reduced risk of seed splitting compared with PBA Jurien <sup>Ⓛ</sup> . Taller plant height, may improve harvestability. Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly slower maturity relative to PBA Jurien <sup>Ⓛ</sup> , slightly quicker than Coyote <sup>Ⓛ</sup> . |

\* EPR amount is ex-GST, <sup>Ⓛ</sup> denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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CHICKPEA

FIELD PEA

LUPIN

Refer to the latest *Crop Sowing Guide* for further information at [nvt.grdc.com.au/resources/crop-sowing-guides](http://nvt.grdc.com.au/resources/crop-sowing-guides)

## Lupin variety yield performance – Kwinana East

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: Bencubbin narrow-leaf lupin.**

| Year                      | 2019     | 2020  | 2021  | 2022  | 2023              |
|---------------------------|----------|-------|-------|-------|-------------------|
| Mean yield (t/ha)         |          | 1.34  | 1.89  | 2.42  |                   |
| Coyote <sup>db</sup>      | No trial | 115   | 113   | 107   | Compromised trial |
| Rosemont <sup>db</sup>    |          |       |       | 109   |                   |
| Lawler <sup>db</sup>      |          | 106   | 107   | 106   |                   |
| PBA Bateman <sup>db</sup> |          | 111   | 107   | 103   |                   |
| PBA Jurien <sup>db</sup>  |          | 104   |       | 106   |                   |
| Gidgee <sup>db</sup>      |          |       | 105   | 106   |                   |
| PBA Gunyidi <sup>db</sup> |          | 107   | 103   | 100   |                   |
| Mandelup <sup>db</sup>    |          | 101   | 101   | 102   |                   |
| PBA Barlock <sup>db</sup> |          | 101   | 99    | 100   |                   |
| Coromup <sup>db</sup>     |          | 102   | 102   | 97    |                   |
| Sowing date               |          | 8 May | 4 May | 7 May | 31 May            |
| Rainfall J–M (mm)         |          | 96    | 140   | 102   | 45                |
| Rainfall A–O (mm)         |          | 149   | 230   | 284   | 113               |

Special thanks to 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

**Table 2: Kalannie narrow-leaf lupin.**

| Year                      | 2019     | 2020  | 2021  | 2022  | 2023              |
|---------------------------|----------|-------|-------|-------|-------------------|
| Mean yield (t/ha)         |          | 1.87  | 2.09  | 3.05  |                   |
| Coyote <sup>db</sup>      | No trial | 128   | 107   | 106   | Compromised trial |
| Rosemont <sup>db</sup>    |          |       |       | 107   |                   |
| PBA Bateman <sup>db</sup> |          | 121   | 106   | 102   |                   |
| Lawler <sup>db</sup>      |          | 112   | 104   | 105   |                   |
| PBA Jurien <sup>db</sup>  |          | 109   |       | 103   |                   |
| PBA Gunyidi <sup>db</sup> |          | 113   | 103   | 100   |                   |
| Gidgee <sup>db</sup>      |          |       | 102   | 105   |                   |
| Mandelup <sup>db</sup>    |          | 102   | 102   | 101   |                   |
| PBA Barlock <sup>db</sup> |          | 103   | 103   | 98    |                   |
| Coromup <sup>db</sup>     |          | 101   | 94    | 101   |                   |
| Sowing date               |          | 8 May | 4 May | 1 May | 31 May            |
| Rainfall J–M (mm)         |          | 108   | 131   | 51    | 37                |
| Rainfall A–O (mm)         |          | 163   | 271   | 269   | 121               |

Special thanks to 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

**Table 3: Merredin narrow-leaf lupin.**

| Year                      | 2019  | 2020  | 2021  | 2022  | 2023   |
|---------------------------|-------|-------|-------|-------|--------|
| Mean yield (t/ha)         | 0.27  | 0.83  | 0.97  | 2.45  | 1.16   |
| Rosemont <sup>db</sup>    |       |       |       | 121   | 105    |
| Gidgee <sup>db</sup>      |       |       | 114   | 119   | 102    |
| Coyote <sup>db</sup>      | 121   | 111   | 102   | 113   | 105    |
| PBA Jurien <sup>db</sup>  | 108   | 114   |       | 109   | 102    |
| Lawler <sup>db</sup>      |       | 109   | 107   | 113   | 103    |
| Mandelup <sup>db</sup>    | 102   | 104   | 105   | 104   | 101    |
| PBA Bateman <sup>db</sup> | 111   | 108   | 100   | 100   | 103    |
| PBA Barlock <sup>db</sup> | 99    | 106   | 105   | 94    | 99     |
| PBA Gunyidi <sup>db</sup> | 105   | 103   | 96    | 94    | 101    |
| PBA Leeman <sup>db</sup>  | 97    | 85    | 85    | 103   | 100    |
| Sowing date               | 7 Jun | 8 May | 8 May | 4 May | 31 May |
| Rainfall J–M (mm)         | 14    | 79    | 82    | 84    | 51     |
| Rainfall A–O (mm)         | 208   | 153   | 245   | 320   | 141    |

Special thanks to 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

Lupin variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of lupin in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2024.

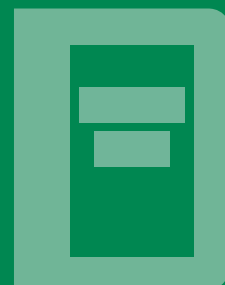
Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

| Table 4: Lupin disease guide for Western Australia. |                        |                              |                         |                          |                      |
|---|------------------------|------------------------------|-------------------------|--------------------------|----------------------|
| Variety   | Anthraxnose resistance | Cucumber mosaic virus (CMV)* | Phomopsis pod infection | Phomopsis stem infection | Sclerotinia stem rot |
| Coromup <sup>ⓓ</sup>                                | MR                     |                              | MS                      | MR                       | S (P)                |
| Coyote <sup>ⓓ</sup>                                 | MRMS                   |                              | MRMS                    | S                        | S (P)                |
| Gidgee <sup>ⓓ</sup>                                 | RMR                    |                              | S (P)                   | MR                       | S (P)                |
| Jenabillup <sup>ⓓ</sup>                             | MS                     |                              | MR                      | MS                       | S (P)                |
| Lawler <sup>ⓓ</sup>                                 | MR                     |                              | MS                      | MR                       | S (P)                |
| Mandelup <sup>ⓓ</sup>                               | MRMS                   |                              | S                       | MR                       | S (P)                |
| PBA Barlock <sup>ⓓ</sup>                            | RMR                    |                              | MR                      | MR                       | S (P)                |
| PBA Bateman <sup>ⓓ</sup>                            | MRMS                   |                              | MS                      | RMR                      | S (P)                |
| PBA Gunyidi <sup>ⓓ</sup>                            | MRMS                   |                              | MRMS                    | RMR                      | S (P)                |
| PBA Jurien <sup>ⓓ</sup>                             | RMR                    |                              | MRMS                    | RMR                      | S (P)                |
| PBA Leeman <sup>ⓓ</sup>                             | MRMS                   |                              | MRMS                    | MR                       | S (P)                |
| Rosemont <sup>ⓓ</sup>                               | MRMS                   |                              | MRMS (P)                | MR                       | S (P)                |
| Wonga   | MR                     |                              | MR                      | MR                       | S (P)                |

\* ratings will be updated when available. Learn more via the [NVT Disease Ratings](#).  
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating.



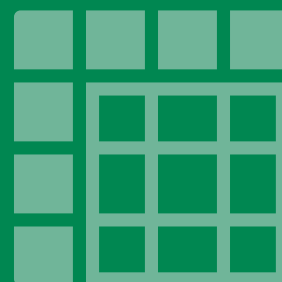
## Harvest Reports & Crop Sowing Guides



### Trial results



### Long Term Yield Reporter



### NVT Disease Ratings

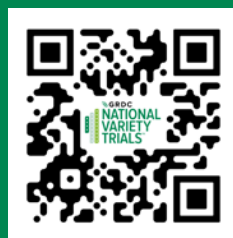
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