



# NVT HARVEST REPORT



REVISED MAY 2024



**Kwinana West**  
**Western Region**



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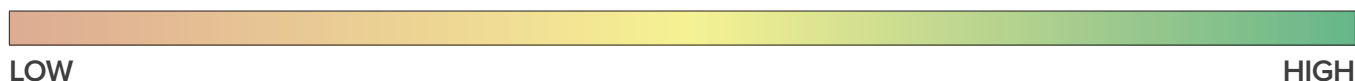
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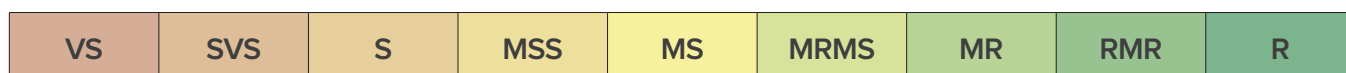
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## LEGEND: MEAN VARIETY YIELD PERFORMANCE



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

## DISEASE RATING COLOUR RANGE



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 West* provides information to support growers and advisers with decisions on variety selection for **Kwinana West**. 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 West** 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 West*, 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 West**.

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](#).

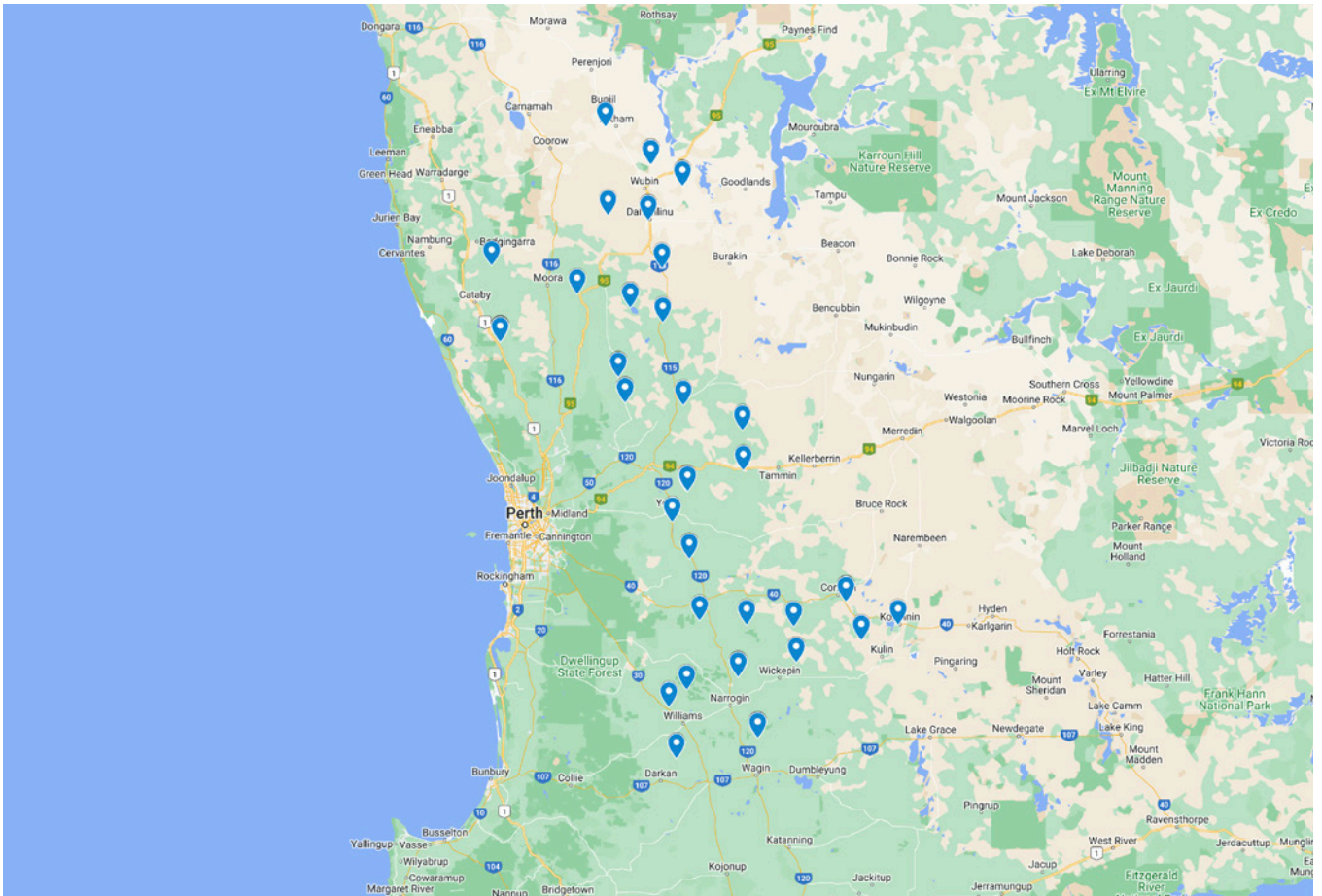
Trials listed as compromised are not suitable for making variety decisions. Results can be found in the [Quarantined trial reports](#).

▶ 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 West

Figure 1: Locality of NVT trial sites in Kwinana West 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	3.90	Dozer <sup>®</sup> CL Plus is a quick-mid maturing APW Clearfield <sup>®</sup> Plus wheat. Dozer <sup>®</sup> CL Plus pushes mid and quick-mid imidazolinone wheat yields and is an excellent alternative to Chief CL Plus. It is best suited to low-medium rainfall areas in Western Australia and South Australia. Dozer <sup>®</sup> CL Plus has strong lodging resistance, moderate early vigour, medium plant height and medium coleoptile length. Dozer <sup>®</sup> CL Plus offers good grain size and test weight. Proactive disease management of stripe rust and CCN in South Australia is recommended with Dozer <sup>®</sup> CL Plus to maximise yield and quality potential.
Firefly <sup>®</sup>	InterGrain	ANW	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.
Genie <sup>®</sup>	InterGrain	AH	3.50	Genie <sup>®</sup> is a mid-slow maturing wheat and is an excellent alternative to RockStar <sup>®</sup> in greater than three-tonne-per-hectare yield environments. In these environments, the variety offers medium-high rainfall growers a yield improvement compared with RockStar <sup>®</sup> . Genie <sup>®</sup> , with its slightly later maturity than RockStar <sup>®</sup> and long coleoptile, enables earlier sowing opportunities to be maximised. Genie <sup>®</sup> has an excellent disease resistance package including useful stem rust and stripe rust resistances. It offers good test weight, moderate grain size and has a medium plant height. Preliminary internal data indicates Genie <sup>®</sup> has good sprouting tolerance. Genie <sup>®</sup> has an AH classification in the western and southern zones and an AH classification is expected for the south-eastern and northern zones in 2024.
LRPB Matador <sup>®</sup>	LongReach Plant Breeders	FEED	3.50	Mid-maturity AH wheat that has consistently outperformed Scepter <sup>®</sup> with an improved shorter canopy and better lodging tolerance. Improved powdery mildew (MS) and stripe rust resistance (MS) over Scepter <sup>®</sup> , adding some minor genes for both diseases. AH quality in SA and Victoria and commercialised by Pacific Seeds.
Thumper <sup>®</sup>	InterGrain	AH	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	FEED	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 Western Australia, 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 SA, 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.

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 West

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: Beverley main season wheat.**

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	2.97		4.60	5.72	3.44	
Tomahawk CL Plus <sup>db*</sup>		Compromised trial		108	115	
Thumper <sup>db</sup>					111	
Calibre <sup>db</sup>			110	108	110	
Brumby <sup>db</sup>				109	109	110
Devil <sup>db</sup>	106			109	109	110
Vixen <sup>db</sup>	112			111	102	113
Ballista <sup>db</sup>	105			108	111	108
Sting <sup>db</sup>	110			109	104	110
LRPB Matador <sup>db</sup>					107	109
Scepter <sup>db</sup>	107			108	106	109
RockStar <sup>db</sup>	103			107	110	107
Firefly <sup>db</sup>				106		106
Ninja <sup>db</sup>	102			105	107	106
Kinsei <sup>db</sup>	98			103	108	102
Dozer <sup>db</sup> CL Plus <sup>*</sup>				103		103
Sowing date	7 Jun	11 May	22 May	12 May	10 May	
Rainfall J–M (mm)	3	50	91	11	85	
Rainfall A–O (mm)	282	213	434	387	254	

Special thanks to 2023 trial cooperator.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	3.13		6.47	6.25	3.20	
Thumper <sup>db</sup>		Compromised trial			110	
Tomahawk CL Plus <sup>db*</sup>				106	113	
Devil <sup>db</sup>	108			109	109	109
Calibre <sup>db</sup>				107	107	113
Brumby <sup>db</sup>				109	109	108
Ballista <sup>db</sup>	107			106	110	110
Vixen <sup>db</sup>	112			110	100	113
RockStar <sup>db</sup>	102			109	111	103
LRPB Matador <sup>db</sup>					107	107
Sting <sup>db</sup>	111			107	102	112
Scepter <sup>db</sup>	107			108	105	108
Firefly <sup>db</sup>				106		104
Ninja <sup>db</sup>	101			106	108	103
Kinsei <sup>db</sup>	98			104	110	99
Dozer <sup>db</sup> CL Plus <sup>*</sup>				101		106
Sowing date	7 Jun	25 May	24 May	3 May	22 May	
Rainfall J–M (mm)	0	49	122	57	51	
Rainfall A–O (mm)	270	185	353	399	210	

Special thanks to 2023 trial cooperator, Colin Guthrie.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.33	1.52		4.02	0.61	
Tomahawk CL Plus <sup>db*</sup>		Compromised trial		111	128	
Vixen <sup>db</sup>	128		117		104	141
Calibre <sup>db</sup>			110		107	140
Sting <sup>db</sup>	125		113		103	138
Devil <sup>db</sup>	114		109		109	118
Brumby <sup>db</sup>					110	113
LRPB Avenger <sup>db</sup>	126		112		99	145
Thumper <sup>db</sup>						111
Scepter <sup>db</sup>	113		110		107	116
LRPB Matador <sup>db</sup>					108	112
LRPB Anvil <sup>db</sup> CL Plus <sup>*</sup>			111		96	145
Ballista <sup>db</sup>	115				104	122
RockStar <sup>db</sup>	100		105		112	92
Firefly <sup>db</sup>						102
Catapult <sup>db</sup>	104		99		107	108
Sowing date	7 Jun	27 May	10 May	20 May	31 May	
Rainfall J–M (mm)	9	113	115	59	36	
Rainfall A–O (mm)	173	149	331	258	115	

Special thanks to 2023 trial cooperator, Boyd Carter.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	2.16	1.46	4.47	5.50	4.05	
Tomahawk CL Plus <sup>db*</sup>		Compromised trial		107	113	
Calibre <sup>db</sup>			119	111	108	110
Vixen <sup>db</sup>	113		126	112	103	111
Thumper <sup>db</sup>						111
Sting <sup>db</sup>	111		121	110	104	109
Devil <sup>db</sup>	107		111	110	107	109
Brumby <sup>db</sup>				110	107	109
Scepter <sup>db</sup>	107		112	110	104	108
LRPB Matador <sup>db</sup>					106	108
Ballista <sup>db</sup>	106			108	106	108
RockStar <sup>db</sup>	103		100	109	108	107
LRPB Avenger <sup>db</sup>	111		127		100	105
Firefly <sup>db</sup>				107		106
Ninja <sup>db</sup>	101		98	106	104	105
LRPB Anvil <sup>db</sup> CL Plus <sup>*</sup>			128	102	97	102
Sowing date	7 Jun	25 May	18 May	12 May	11 May	
Rainfall J–M (mm)	29	66	64	44	58	
Rainfall A–O (mm)	244	167	397	377	272	

Special thanks to 2023 trial cooperator, Adam Rendell.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)



**Table 5: Cunderdin main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.92	3.41	3.89	4.09	2.72
Tomahawk CL Plus <sup>db*</sup>				104	114
Thumper <sup>db</sup>					116
Calibre <sup>db</sup>		108	110	109	113
Devil <sup>db</sup>	110	107	109	109	112
Vixen <sup>db</sup>	119	113	112	98	109
Brumby <sup>db</sup>			108	109	112
Sting <sup>db</sup>	116	110	110	101	109
Ballista <sup>db</sup>	108		106	110	111
LRPB Matador <sup>db</sup>				106	110
RockStar <sup>db</sup>	103	104	106	111	111
Scepter <sup>db</sup>	110	107	108	104	109
Firefly <sup>db</sup>			104		110
LRPB Avenger <sup>db</sup>	117	110		93	102
Ninja <sup>db</sup>	101	102	104	106	107
Catapult <sup>db</sup>	102	100	101	110	106
<b>Sowing date</b>	<b>7 Jun</b>	<b>28 May</b>	<b>26 May</b>	<b>12 May</b>	<b>5 May</b>
<b>Rainfall J–M (mm)</b>	<b>6</b>	<b>98</b>	<b>87</b>	<b>74</b>	<b>52</b>
<b>Rainfall A–O (mm)</b>	<b>199</b>	<b>136</b>	<b>309</b>	<b>310</b>	<b>194</b>

Special thanks to 2023 trial cooperator.

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

**Table 6: Dalwallinu main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			4.34	4.76	0.97
Tomahawk CL Plus <sup>db*</sup>				106	111
RockStar <sup>db</sup>			107	116	97
Brumby <sup>db</sup>			108	110	106
Devil <sup>db</sup>			107	109	108
Thumper <sup>db</sup>					111
Calibre <sup>db</sup>			106	107	115
LRPB Matador <sup>db</sup>				107	106
Denison <sup>db</sup>	No trial	No trial	100	118	84
Firefly <sup>db</sup>			102		102
Scepter <sup>db</sup>			109	104	107
Kinsei <sup>db</sup>			100	114	94
Vixen <sup>db</sup>			114	96	116
Catapult <sup>db</sup>			99	113	98
Ninja <sup>db</sup>			104	108	100
Sting <sup>db</sup>			109	98	116
<b>Sowing date</b>			<b>18 May</b>	<b>18 May</b>	<b>31 May</b>
<b>Rainfall J–M (mm)</b>			<b>134</b>	<b>121</b>	<b>44</b>
<b>Rainfall A–O (mm)</b>			<b>331</b>	<b>306</b>	<b>148</b>

Special thanks to 2023 trial cooperator, Wonnerup Trading Co, Miling.

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

**Table 7: Dandaragan main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	5.20	4.95	5.33	3.60	3.69
Tomahawk CL Plus <sup>db*</sup>				111	118
RockStar <sup>db</sup>	109	108	111	114	110
Thumper <sup>db</sup>					114
Brumby <sup>db</sup>			108	111	112
Devil <sup>db</sup>	108	107	107	110	113
Calibre <sup>db</sup>		106	104	107	115
LRPB Matador <sup>db</sup>				109	111
Scepter <sup>db</sup>	107	106	106	107	111
Firefly <sup>db</sup>			107		108
Vixen <sup>db</sup>	107	105	103	104	114
Kinsei <sup>db</sup>	104	105	107	110	104
Ninja <sup>db</sup>	103	106	107	108	106
Ballista <sup>db</sup>	103		103	106	111
Denison <sup>db</sup>	107	102	108	110	99
Sting <sup>db</sup>	106	104	102	103	113
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>17 May</b>	<b>20 May</b>	<b>23 May</b>
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>77</b>	<b>84</b>	<b>40</b>	<b>25</b>
<b>Rainfall A–O (mm)</b>	<b>241</b>	<b>220</b>	<b>455</b>	<b>576</b>	<b>257</b>

Special thanks to 2023 trial cooperator.

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

**Table 8: Goomalling main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.91	1.29	4.75	6.98	2.94
Tomahawk CL Plus <sup>db*</sup>				109	114
Vixen <sup>db</sup>	120	118	111	107	117
Calibre <sup>db</sup>		115	113	107	111
Sting <sup>db</sup>	116	116	109	106	113
Thumper <sup>db</sup>					103
Devil <sup>db</sup>	108	111	113	107	107
Brumby <sup>db</sup>			113	107	106
Scepter <sup>db</sup>	109	110	111	106	108
LRPB Matador <sup>db</sup>				106	106
Ballista <sup>db</sup>	107		109	107	105
LRPB Avenger <sup>db</sup>	118	111		101	115
LRPB Havoc <sup>db</sup>	113	108	103	103	110
RockStar <sup>db</sup>	100	103	113	106	101
Firefly <sup>db</sup>			110		101
Razor CL Plus <sup>db*</sup>	111	109	100	102	109
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>31 May</b>	<b>24 May</b>	<b>31 May</b>
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>84</b>	<b>93</b>	<b>119</b>	<b>74</b>
<b>Rainfall A–O (mm)</b>	<b>250</b>	<b>153</b>	<b>330</b>	<b>314</b>	<b>184</b>

Special thanks to 2023 trial cooperator, Doug French & Co.

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

WHEAT  
BARLEY  
OAT  
CANOLA  
CHICKPEA  
FIELD PEA  
LENTIL  
LUPIN



**Table 9: Kondinin main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.53	4.62	5.27	3.04
Tomahawk CL Plus <sup>db*</sup>				112	113
Calibre <sup>db</sup>		117	110	113	111
Vixen <sup>db</sup>		118	114	108	109
Thumper <sup>db</sup>					113
Devil <sup>db</sup>		111	109	111	111
Brumby <sup>db</sup>			109	111	111
Sting <sup>db</sup>		116	111	108	108
Ballista <sup>db</sup>	No trial		106	110	109
LRPB Matador <sup>db</sup>				109	109
Scepter <sup>db</sup>		109	109	108	108
RockStar <sup>db</sup>		102	106	110	110
Firefly <sup>db</sup>			104		108
LRPB Avenger <sup>db</sup>		115		103	103
Catapult <sup>db</sup>		103	102	108	104
Ninja <sup>db</sup>		101	104	105	106
Sowing date		25 May	25 May	16 May	9 May
Rainfall J–M (mm)		71	72	26	48
Rainfall A–O (mm)		169	345	350	203

Special thanks to 2023 trial cooperator, Gary Biglin.

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

**Table 10: Kulin main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.72	2.87	4.66	5.01	3.13
Vixen <sup>db</sup>	123	121	114	109	119
Tomahawk CL Plus <sup>db*</sup>				112	118
Sting <sup>db</sup>	117	117	110	108	115
LRPB Avenger <sup>db</sup>	121	115		104	113
LRPB Havoc <sup>db</sup>	116	113	111	105	112
Calibre <sup>db</sup>		114	107	108	112
Scepter <sup>db</sup>	112	111	108	107	110
Devil <sup>db</sup>	110	110	107	108	110
LRPB Anvil <sup>db</sup> CL Plus*		113	108	101	110
Brumby <sup>db</sup>			107	108	109
LRPB Matador <sup>db</sup>				107	109
Razor CL Plus <sup>db*</sup>	112	111	107	103	109
Thumper <sup>db</sup>					109
Ballista <sup>db</sup>	105		103	107	109
RockStar <sup>db</sup>	103	102	104	106	104
Sowing date	7 Jun	14 May	21 May	26 May	31 May
Rainfall J–M (mm)	5	50	59	33	27
Rainfall A–O (mm)	171	175	388	319	253

Special thanks to 2023 trial cooperator, Evasham Farms.

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

**Table 11: Miling main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.40	2.43	4.75	5.78	1.86
Tomahawk CL Plus <sup>db*</sup>				106	115
Vixen <sup>db</sup>	126	119	108	98	119
Brumby <sup>db</sup>			107	109	107
Devil <sup>db</sup>	107	105	106	108	109
Calibre <sup>db</sup>		107	103	106	115
LRPB Matador <sup>db</sup>				107	107
Thumper <sup>db</sup>					106
Sting <sup>db</sup>	120	113	104	100	116
Scepter <sup>db</sup>	110	109	107	104	108
RockStar <sup>db</sup>	95	100	108	112	99
LRPB Havoc <sup>db</sup>	118	118	109	93	108
Ballista <sup>db</sup>	109		100	108	109
LRPB Avenger <sup>db</sup>	123	116		92	117
Ninja <sup>db</sup>	99	101	105	108	99
Firefly <sup>db</sup>			103		101
Sowing date	7 Jun	28 May	21 May	17 May	24 May
Rainfall J–M (mm)	8	120	126	114	23
Rainfall A–O (mm)	270	152	403	401	186

Special thanks to 2023 trial cooperator.

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

**Table 12: Narrogin main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	3.72	2.27	4.25	5.33	3.22
Tomahawk CL Plus <sup>db*</sup>				116	112
Brumby <sup>db</sup>			110	117	105
Vixen <sup>db</sup>	114	117	114	101	115
Calibre <sup>db</sup>		110	113	110	109
Devil <sup>db</sup>	109	111	110	114	106
RockStar <sup>db</sup>	105	110	105	124	100
Thumper <sup>db</sup>					105
LRPB Matador <sup>db</sup>				113	106
Scepter <sup>db</sup>	109	112	109	110	107
Sting <sup>db</sup>	111	112	112	100	112
Firefly <sup>db</sup>			106		101
Ballista <sup>db</sup>	106		110	104	107
LRPB Avenger <sup>db</sup>	110	109		95	112
Ninja <sup>db</sup>	103	107	104	111	101
Catapult <sup>db</sup>	102	100	103	115	97
Sowing date	7 Jun	25 May	21 May	28 May	20 May
Rainfall J–M (mm)	13	68	63	19	55
Rainfall A–O (mm)	324	250	477	350	289

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  
LENTIL  
LUPIN

**Table 13: Yealering main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.74	3.19	5.07	2.86
Tomahawk CL Plus <sup>db</sup> *	No trial			111	118
Calibre <sup>db</sup>		110	111	108	115
Vixen <sup>db</sup>		107	113	107	117
Brumby <sup>db</sup>			110	108	111
Devil <sup>db</sup>		111	109	108	111
Thumper <sup>db</sup>					108
Sting <sup>db</sup>		107	110	106	114
RockStar <sup>db</sup>		111	108	108	107
LRPB Matador <sup>db</sup>				107	110
Scepter <sup>db</sup>		108	109	107	110
Ballista <sup>db</sup>			104	105	107
Firefly <sup>db</sup>			105		105
LRPB Avenger <sup>db</sup>		100		103	114
Catapult <sup>db</sup>		105	105	104	105
Ninja <sup>db</sup>		107	103	104	102
Sowing date		9 May	31 May	27 May	15 May
Rainfall J–M (mm)		67	62	25	38
Rainfall A–O (mm)		182	366	316	263

Special thanks to 2023 trial cooperator, Gary Lang.

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

**Table 14: York main season wheat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.82	2.68	4.40	5.29	3.14
Thumper <sup>db</sup>					111
Tomahawk CL Plus <sup>db</sup> *				101	114
Calibre <sup>db</sup>		111	103	106	114
Devil <sup>db</sup>	108	111	105	106	110
Ballista <sup>db</sup>	105		105	107	110
Brumby <sup>db</sup>			105	106	109
Vixen <sup>db</sup>	119	111	104	95	114
Sting <sup>db</sup>	114	110	103	99	113
RockStar <sup>db</sup>	101	110	105	109	105
LRPB Matador <sup>db</sup>				104	108
Scepter <sup>db</sup>	109	110	104	102	109
Firefly <sup>db</sup>			104		105
Ninja <sup>db</sup>	100	107	105	105	103
Kinsei <sup>db</sup>	95	105	103	110	100
Catapult <sup>db</sup>	99	103	100	109	102
Sowing date	7 Jun	25 May	17 May	12 May	13 May
Rainfall J–M (mm)	4	54	135	11	54
Rainfall A–O (mm)	250	180	447	371	213

Special thanks to 2023 trial cooperator, Jonlorrie Farms.

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

**Table 15: Narrogin early season wheat.**

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	3.60		5.19	6.08	4.63	
Genie <sup>db</sup>		Compromised trial			115	
Denison <sup>db</sup>				117	113	114
Catapult <sup>db</sup>	103			117	109	110
Valiant <sup>db</sup> CL Plus*				110	109	110
RockStar <sup>db</sup>	103			110	109	109
Kinsei <sup>db</sup>	101			114	106	110
Brumby <sup>db</sup>						108
RGT Zanzibar				104	108	108
Cutlass <sup>db</sup>	102			105	105	105
IGW6755						106
Longsword <sup>db</sup>	103			103	104	102
Stockade <sup>db</sup>					107	101
Magenta <sup>db</sup>	99			97	96	96
Sheriff CL Plus <sup>db</sup> *	94			105	91	96
EG Titanium	94			100	93	98
Sowing date	18 Apr	29 Apr	28 Apr	29 Apr	14 Apr	
Rainfall J–M (mm)	13	68	63	19	55	
Rainfall A–O (mm)	324	250	477	350	289	
Irrigation A–O (mm)		10	10	10		

Special thanks to 2023 trial cooperator.

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

**Table 16: York early season wheat.**

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)			4.88	5.32	3.02		
Genie <sup>db</sup>	Trial failed	Compromised trial			133		
RGT Zanzibar				108	112	122	
Longsword <sup>db</sup>				109	120	90	
Valiant <sup>db</sup> CL Plus*				106	97	127	
Stockade <sup>db</sup>					108	119	
Denison <sup>db</sup>				108	95	125	
Illabo <sup>db</sup>				99	118	93	
IGW6755							132
Kinsei <sup>db</sup>				105	91	122	
Cutlass <sup>db</sup>				102	96	111	
RockStar <sup>db</sup>				101	84	129	
Catapult <sup>db</sup>				105	86	114	
EG Titanium				99	97	101	
Brumby <sup>db</sup>							105
Yitpi				98	95	95	
Sowing date	25 Apr	24 Apr	23 Apr	14 Apr	12 Apr		
Rainfall J–M (mm)	4	54	135	11	54		
Rainfall A–O (mm)	250	180	447	371	213		
Irrigation A–O (mm)		10	10	10			

Special thanks to 2023 trial cooperator, Jonlorrie Farms.

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

WHEAT  
BARLEY  
OAT  
CANOLA  
CHICKPEA  
FIELD PEA  
LENTIL  
LUPIN

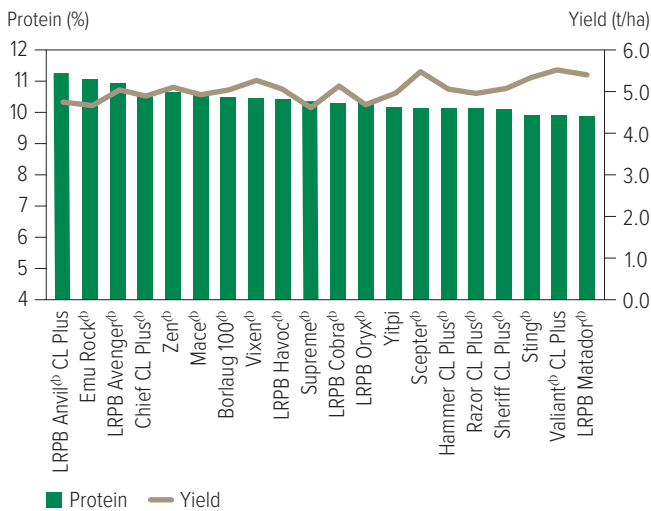
## Wheat variety quality – Kwinana West

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.

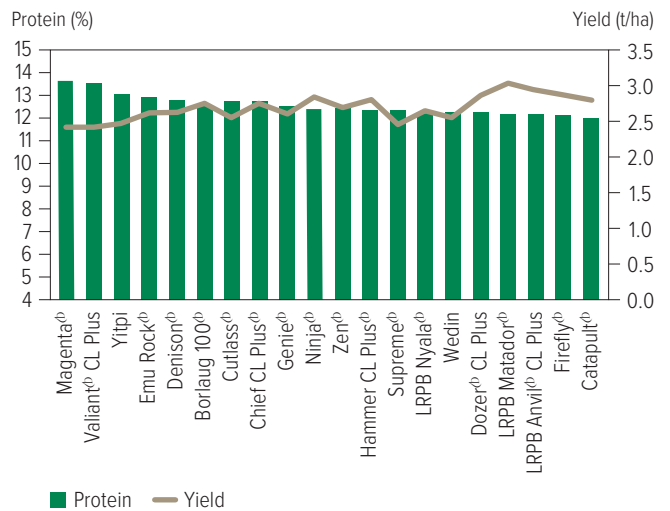
The following figures show the grain quality trends as histograms from 2022 and 2023 NVT averaged for trials in the Kwinana West region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

### Protein and yield comparisons

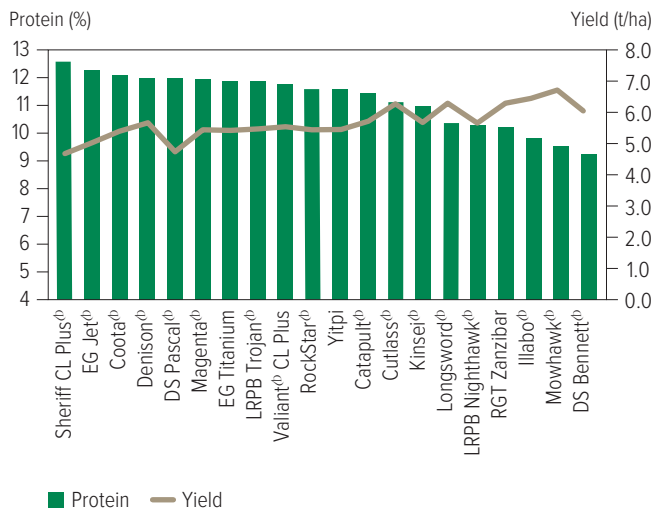
**Figure 1: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from 14 NVT sites in Kwinana West in 2022.**



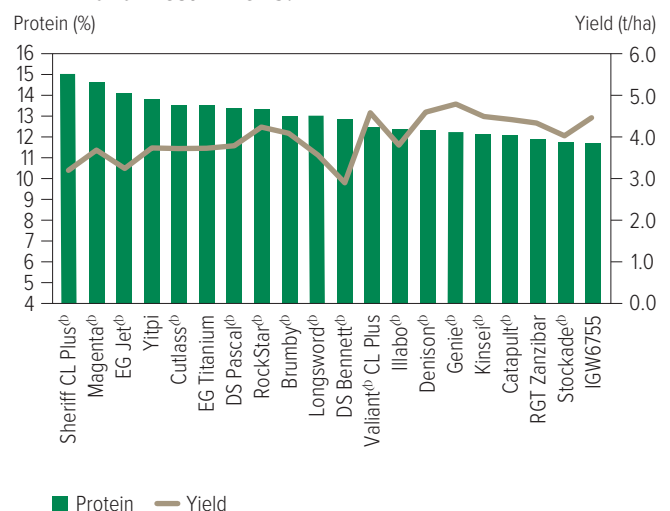
**Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from 14 NVT sites in Kwinana West in 2023.**



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



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



WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

## Test weight comparisons

Figure 5: Test weight (kg/hL) comparisons for main season wheat varieties from 14 NVT sites in Kwinana West in 2022.

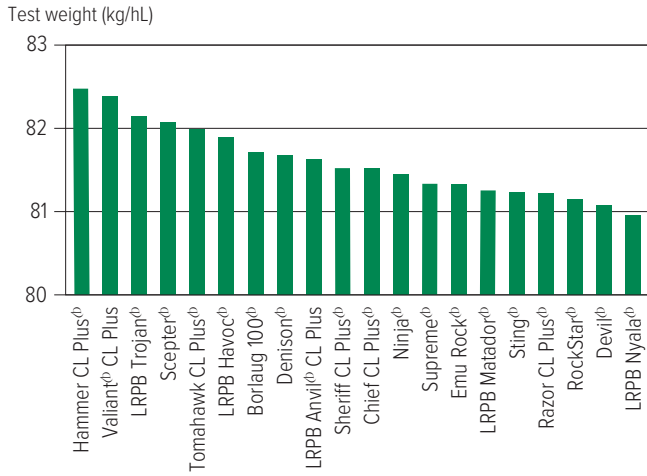


Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from 14 NVT sites in Kwinana West in 2023.

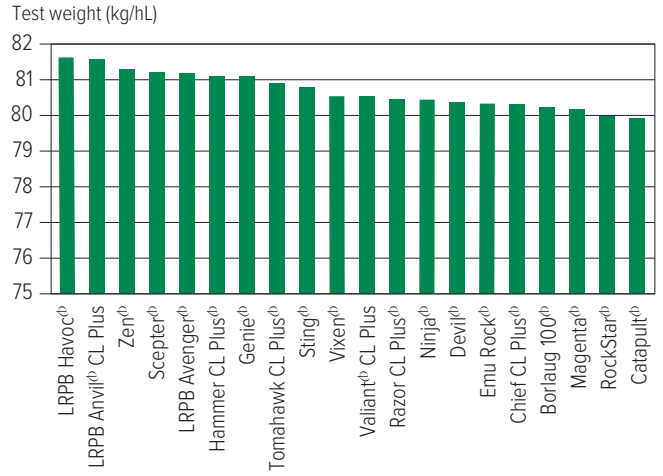


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Kwinana West in 2022.

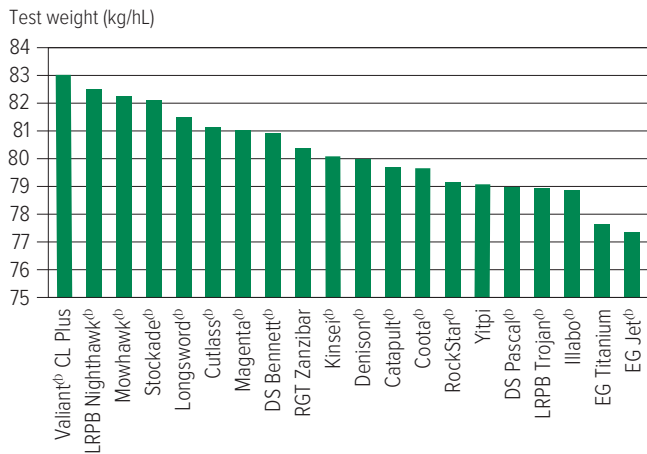
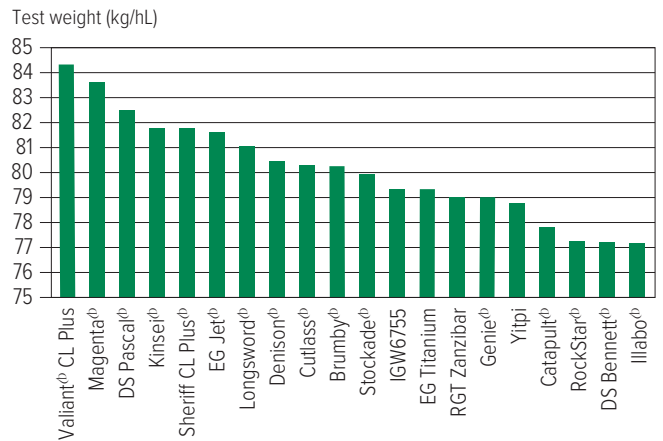


Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Kwinana West in 2023.



WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

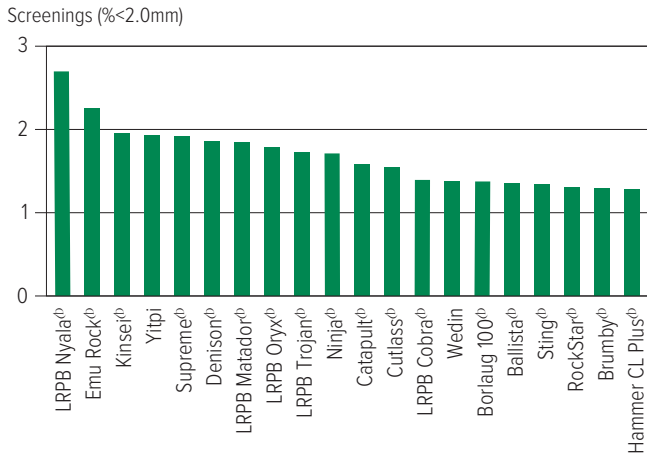
FIELD PEA

LENTIL

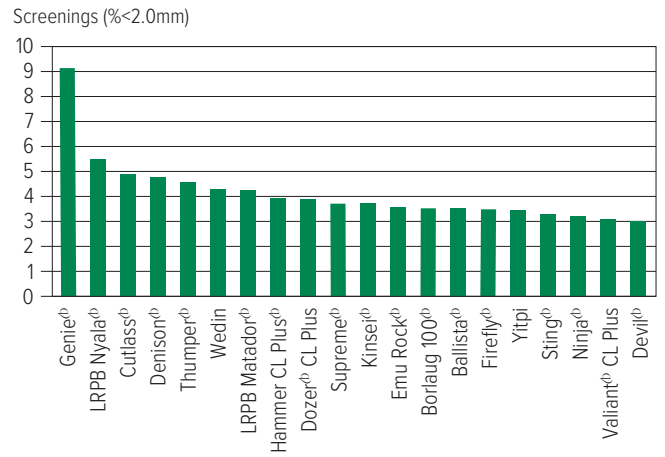
LUPIN

## Screenings comparisons

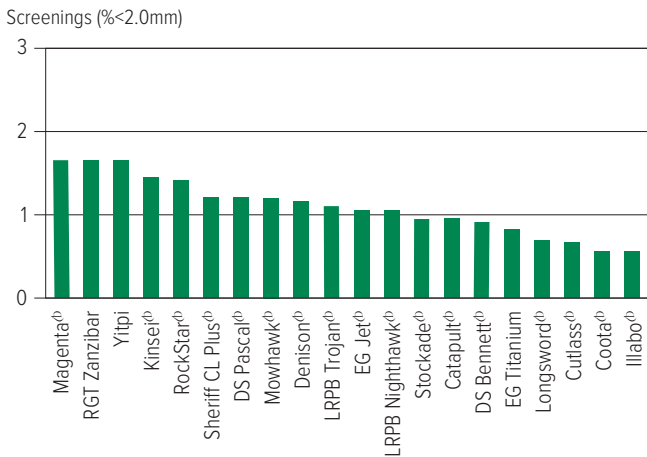
**Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from 14 NVT sites in Kwinana West in 2022.**



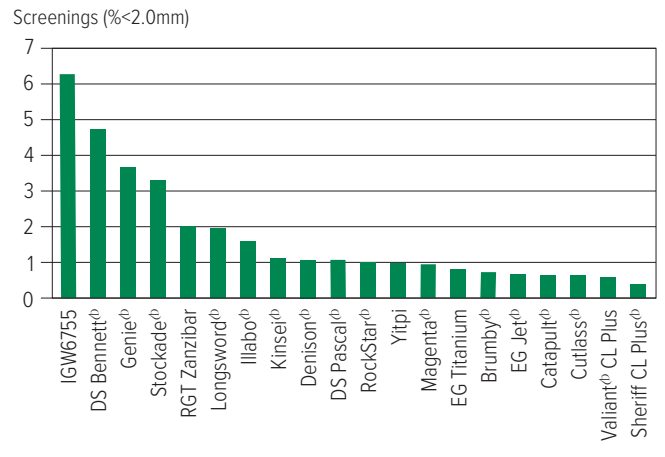
**Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from 14 NVT sites in Kwinana West in 2023.**



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



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



## 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 17: Wheat disease guide for Western Australia.**

Variety	Yellow spot	Nodorum blotch (leaf)	Nodorum blotch (glume)	Stem rust	Stripe rust (west coast resistance)	Leaf rust	Powdery mildew	Septoria tritici blotch	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus quasitereoides)	CCN	Crown rot
Ballista <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

WHEAT  
BARLEY  
OAT  
CANOLA  
CHICKPEA  
FIELD PEA  
LENTIL  
LUPIN

Continued on next page

Table 17: Wheat disease guide for Western Australia (continued).

Variety	Yellow spot	Nodorum blotch (leaf)	Nodorum blotch (glume)	Stem rust	Stripe rust (west coast resistance)	Leaf rust	Powdery mildew	Septoria tritici blotch	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus quasitereoides)	CCN	Crown rot
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
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.

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

# 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.

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

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)



## Barley variety yield performance – Kwinana West

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: Beverley main season barley.**

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)			4.03	6.97	3.93	
Combat <sup>db</sup>		No trial	103	109	108	
Neo <sup>db</sup> CL*					103	
Titan AX <sup>db*</sup>					103	
Leabrook <sup>db</sup>				110	103	103
Cyclops <sup>db</sup>				104	105	104
Beast <sup>db</sup>				102	102	106
Compass <sup>db</sup>				108	100	103
Zena <sup>db</sup> CL*				106	104	97
RGT Planet <sup>db</sup>				106	104	97
Spinnaker <sup>db</sup>				102	104	101
Minotaur <sup>db</sup>				99	104	103
Rosalind <sup>db</sup>				97	104	105
Laperouse <sup>db</sup>				102	102	102
Buff <sup>db</sup>				101	102	102
Commodus <sup>db</sup> CL*				102	98	101
Sowing date			11 May	22 May	12 May	10 May
Rainfall J–M (mm)		50	91	11	85	
Rainfall A–O (mm)		213	434	387	254	

Special thanks to 2023 trial cooperator.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	3.06	4.15	5.65	5.99	4.10
Neo <sup>db</sup> CL*					106
Combat <sup>db</sup>			109	111	111
Cyclops <sup>db</sup>		109	110	106	105
Rosalind <sup>db</sup>	106	105	105	106	105
Minotaur <sup>db</sup>		108	106	105	103
Spinnaker <sup>db</sup>			106	107	103
Leabrook <sup>db</sup>	103	105	105	104	106
Titan AX <sup>db*</sup>				104	106
Beast <sup>db</sup>	104	106	104	102	106
RGT Planet <sup>db</sup>	101	101	105	106	100
Zena <sup>db</sup> CL*			104	107	100
Laperouse <sup>db</sup>	101	104	105	101	101
Buff <sup>db</sup>	102	102	100	103	103
Compass <sup>db</sup>	103	101	100	99	105
Maximus <sup>db</sup> CL*	102	102	103	99	100
Sowing date	7 Jun	25 May	24 May	3 May	22 May
Rainfall J–M (mm)	0	49	122	57	51
Rainfall A–O (mm)	270	185	353	399	210

Special thanks to 2023 trial cooperator, Colin Guthrie.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.09	1.14	3.60	3.77	0.52
Combat <sup>db</sup>			110	104	153
Rosalind <sup>db</sup>	137	122	101	112	159
Beast <sup>db</sup>	129	121	106	104	135
Fathom <sup>db</sup>	132	119	106	95	150
Compass <sup>db</sup>	124	110	105	103	124
Litmus <sup>db</sup>	131	91	94	113	149
Maximus <sup>db</sup> CL*	119	118	100	104	129
La Trobe <sup>db</sup>	119	109	100	105	128
Buff <sup>db</sup>	118	106	100	105	131
Minotaur <sup>db</sup>		112	102	103	116
Leabrook <sup>db</sup>	108	106	106	102	100
Neo <sup>db</sup> CL*					94
Cyclops <sup>db</sup>		110	104	104	93
Commodus <sup>db</sup> CL*		106	102	100	116
Spartacus CL <sup>db*</sup>	111	108	98	102	117
Sowing date	7 Jun	27 May	10 May	20 May	31 May
Rainfall J–M (mm)	9	113	115	59	36
Rainfall A–O (mm)	173	149	331	258	115

Special thanks to 2023 trial cooperator, Boyd Carter.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.67	1.21	4.58	5.69	4.88
Combat <sup>db</sup>			113	110	113
Rosalind <sup>db</sup>	111	134	108	107	109
Neo <sup>db</sup> CL*					110
Beast <sup>db</sup>	111	132	105	99	103
Minotaur <sup>db</sup>		101	107	105	106
Maximus <sup>db</sup> CL*	109	133	106	98	103
Spinnaker <sup>db</sup>			103	109	107
Buff <sup>db</sup>	102	107	102	105	105
Cyclops <sup>db</sup>		102	106	102	103
Fathom <sup>db</sup>	105	120	103	98	103
La Trobe <sup>db</sup>	107	128	100	99	100
Spartacus CL <sup>db*</sup>	106	128	101	96	99
Leabrook <sup>db</sup>	104	105	101	100	101
Compass <sup>db</sup>	108	127	99	96	99
Litmus <sup>db</sup>	107	137	89	101	98
Sowing date	7 Jun	25 May	18 May	12 May	11 May
Rainfall J–M (mm)	29	66	64	44	58
Rainfall A–O (mm)	244	167	397	377	272

Special thanks to 2023 trial cooperator, Adam Rendell.  
 \* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT  
 BARLEY  
 OAT  
 CANOLA  
 CHICKPEA  
 FIELD PEA  
 LENTIL  
 LUPIN

**Table 5: Dandaragan main season barley.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	5.45	5.56	5.17	4.37	4.24
Neo <sup>db</sup> CL*					106
Combat <sup>db</sup>			116	110	113
Cyclops <sup>db</sup>		107	108	108	111
Minotaur <sup>db</sup>		104	114	105	105
Rosalind <sup>db</sup>	101	104	112	108	102
Spinnaker <sup>db</sup>			116	105	98
Laperouse <sup>db</sup>	102	104	101	103	107
Beast <sup>db</sup>	104	102	94	106	111
Maximus <sup>db</sup> CL*	98	104	108	103	102
RGT Planet <sup>db</sup>	100	102	112	102	97
Zena <sup>db</sup> CL*			112	103	95
Leabrook <sup>db</sup>	106	101	91	105	111
Titan AX <sup>db*</sup>				103	110
Buff <sup>db</sup>	101	99	103	102	99
La Trobe <sup>db</sup>	100	99	95	101	100
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>17 May</b>	<b>20 May</b>	<b>23 May</b>
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>77</b>	<b>84</b>	<b>40</b>	<b>25</b>
<b>Rainfall A–O (mm)</b>	<b>241</b>	<b>220</b>	<b>455</b>	<b>576</b>	<b>257</b>

Special thanks to 2023 trial cooperator.

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

**Table 6: Miling main season barley.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.44	2.96	3.76	6.83	2.24
Maximus <sup>db</sup> CL*	122	114	121	106	109
Beast <sup>db</sup>	117	113	111	103	120
Rosalind <sup>db</sup>	128	110	111	104	108
Cyclops <sup>db</sup>		108	116	105	107
Spartacus CL <sup>db*</sup>	115	109	113	103	104
Combat <sup>db</sup>			105	105	116
Laperouse <sup>db</sup>	102	106	111	103	106
Minotaur <sup>db</sup>		103	109	104	103
Neo <sup>db</sup> CL*					94
La Trobe <sup>db</sup>	115	107	104	100	106
Compass <sup>db</sup>	108	108	97	98	118
Leabrook <sup>db</sup>	102	105	101	100	112
Fathom <sup>db</sup>	102	104	96	100	117
Commodus <sup>db</sup> CL*		105	98	98	111
Spinnaker <sup>db</sup>			99	101	92
<b>Sowing date</b>	<b>7 Jun</b>	<b>28 May</b>	<b>21 May</b>	<b>17 May</b>	<b>24 May</b>
<b>Rainfall J–M (mm)</b>	<b>8</b>	<b>120</b>	<b>126</b>	<b>114</b>	<b>23</b>
<b>Rainfall A–O (mm)</b>	<b>270</b>	<b>152</b>	<b>403</b>	<b>401</b>	<b>186</b>

Special thanks to 2023 trial cooperator.

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

**Table 7: Narrogin main season barley.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	3.82	3.73	5.03	5.74	2.82
Combat <sup>db</sup>			108	115	101
Beast <sup>db</sup>	111	110	104	98	118
Leabrook <sup>db</sup>	108	108	108	102	109
Neo <sup>db</sup> CL*					98
Cyclops <sup>db</sup>		108	106	107	106
Titan AX <sup>db*</sup>				106	100
Compass <sup>db</sup>	111	109	105	94	118
Rosalind <sup>db</sup>	106	105	101	100	117
Minotaur <sup>db</sup>		102	102	107	100
Laperouse <sup>db</sup>	101	105	103	102	103
Spinnaker <sup>db</sup>			102	107	99
Commodus <sup>db</sup> CL*		104	101	93	111
Buff <sup>db</sup>	103	100	101	101	103
Fathom <sup>db</sup>	109	100	99	98	103
La Trobe <sup>db</sup>	104	104	99	93	114
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>21 May</b>	<b>28 May</b>	<b>20 May</b>
<b>Rainfall J–M (mm)</b>	<b>13</b>	<b>68</b>	<b>63</b>	<b>19</b>	<b>55</b>
<b>Rainfall A–O (mm)</b>	<b>324</b>	<b>250</b>	<b>477</b>	<b>350</b>	<b>289</b>

Special thanks to 2023 trial cooperator.

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

**Table 8: Yealering main season barley.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		4.59	3.30	4.84	3.11
Combat <sup>db</sup>			116	114	107
Neo <sup>db</sup> CL*					103
Cyclops <sup>db</sup>		108	111	112	109
Beast <sup>db</sup>		106	111	109	115
Rosalind <sup>db</sup>		107	107	112	108
Leabrook <sup>db</sup>		104	113	106	112
Minotaur <sup>db</sup>		108	105	109	102
Titan AX <sup>db*</sup>	No trial			103	107
Compass <sup>db</sup>		100	111	101	115
Laperouse <sup>db</sup>		103	105	105	105
Maximus <sup>db</sup> CL*		103	99	107	106
Spinnaker <sup>db</sup>			104	107	99
Buff <sup>db</sup>		102	103	102	101
Fathom <sup>db</sup>		105	102	98	103
La Trobe <sup>db</sup>		98	101	101	106
<b>Sowing date</b>		<b>9 May</b>	<b>31 May</b>	<b>27 May</b>	<b>15 May</b>
<b>Rainfall J–M (mm)</b>		<b>67</b>	<b>62</b>	<b>25</b>	<b>38</b>
<b>Rainfall A–O (mm)</b>		<b>182</b>	<b>366</b>	<b>316</b>	<b>263</b>

Special thanks to 2023 trial cooperator, Gary Lang.

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

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

**Table 9: York main season barley.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.43	4.38	6.42	3.95
Neo <sup>Ⓛ</sup> CL*	No trial				106
Combat <sup>Ⓛ</sup>			104	116	108
Cyclops <sup>Ⓛ</sup>		107	113	101	108
Leabrook <sup>Ⓛ</sup>		100	107	101	111
Minotaur <sup>Ⓛ</sup>		104	105	106	101
Beast <sup>Ⓛ</sup>		106	108	98	107
Spinnaker <sup>Ⓛ</sup>			99	110	100
Rosalind <sup>Ⓛ</sup>		109	101	106	99
Titan AX <sup>Ⓛ*</sup>				103	112
RGT Planet <sup>Ⓛ</sup>		98	99	109	102
Zena <sup>Ⓛ</sup> CL*			97	110	102
Laperouse <sup>Ⓛ</sup>		104	109	97	104
Fandaga <sup>Ⓛ</sup>				107	100
Buff <sup>Ⓛ</sup>		99	94	107	100
Compass <sup>Ⓛ</sup>		99	102	96	109
<b>Sowing date</b>			<b>25 May</b>	<b>17 May</b>	<b>12 May</b>
<b>Rainfall J–M (mm)</b>		<b>54</b>	<b>135</b>	<b>11</b>	<b>54</b>
<b>Rainfall A–O (mm)</b>		<b>180</b>	<b>447</b>	<b>371</b>	<b>213</b>

Special thanks to 2023 trial cooperator, Jonlorrie Farms.

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

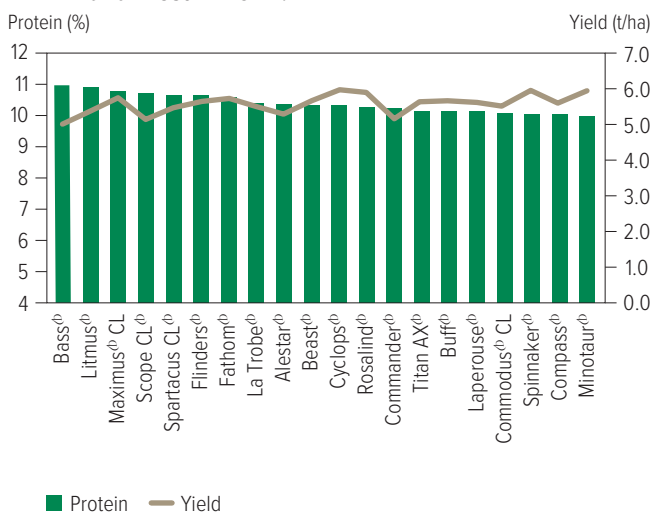
## Barley variety quality – Kwinana West

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.

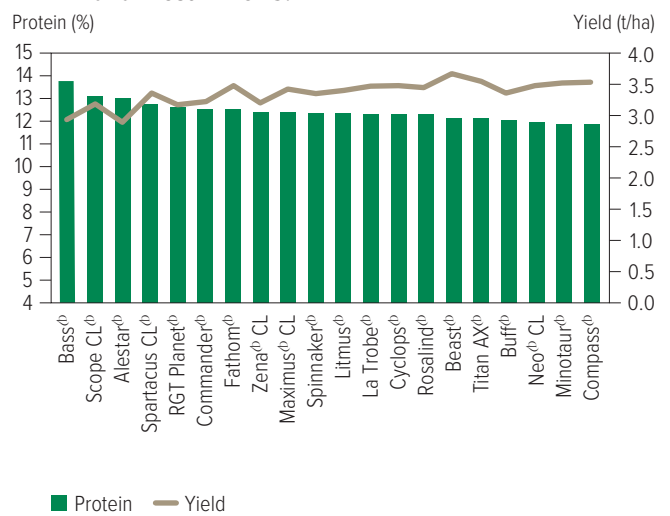
The following figures show the grain quality trends as histograms from 2022 and 2023 NVT averaged for trials in the Kwinana West region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

### Protein and yield comparisons

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

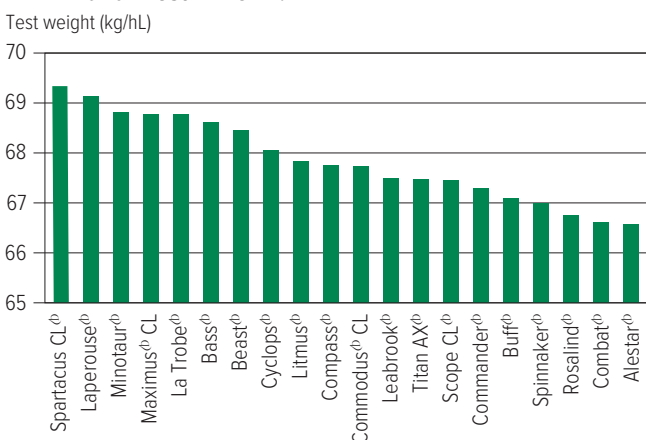


**Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from nine NVT sites in Kwinana West in 2023.**

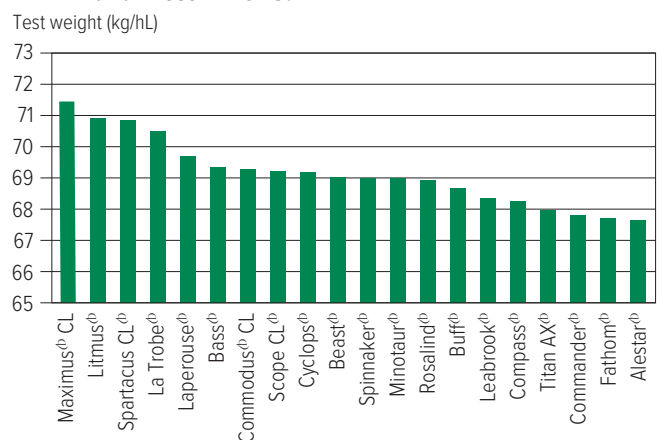


### Test weight comparisons

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



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



## Screenings comparisons

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

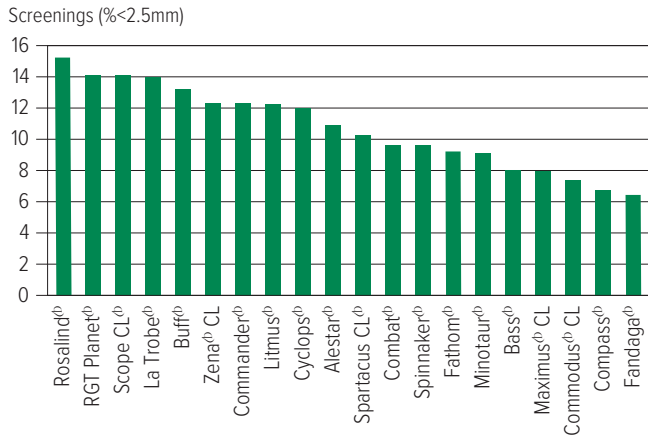
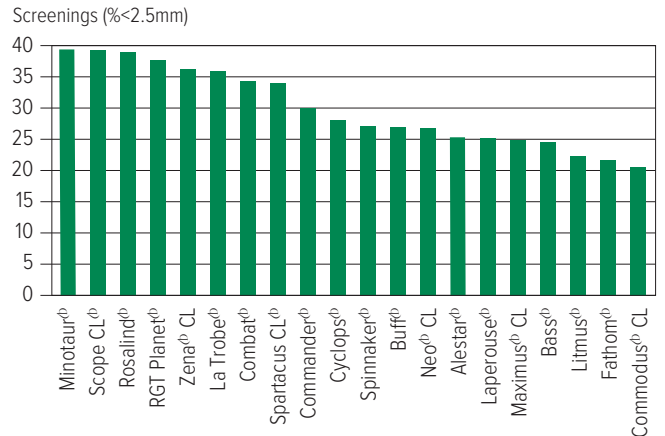


Figure 6: Screenings (<2.5mm) comparisons for main season barley varieties from nine NVT sites in Kwinana West in 2023.



## Retention comparisons

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

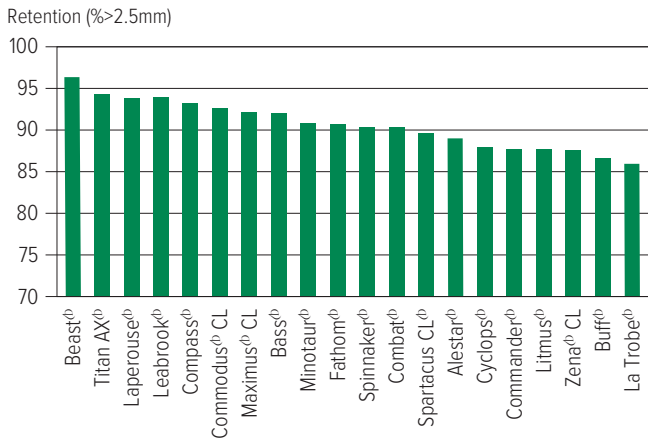
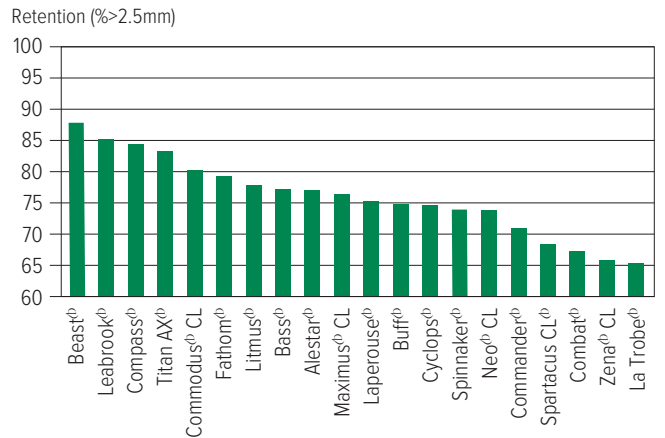


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from nine NVT sites in Kwinana West in 2023.



WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

## 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 10: 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 ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus quasitereoides</i> )	CCN	Ramularia
Alestar <sup>db</sup>	S	MRMS-S	S	RMR	MS	S	MRMS	MR		R <sup>a</sup> (P)	SVS
Banks <sup>db</sup>	SVS	MRMS-MS	MSS	MR-MS	S	MSS	MRMS	MS	MSS	S	VS
Bass <sup>db</sup>	MRMS-MS	MRMS-S	MSS	MSS	SVS	MSS	MRMS	MS	MSS	S	VS
Beast <sup>db</sup>	S	MRMS-S	MSS	RMR	S	S	MSS	MRMS	MSS	MR	SVS
Bottler <sup>db</sup>	S	MRMS-MSS	MSS	RMR	MS	SVS	MS	MS			SVS
Buff <sup>db</sup>	MS	MRMS-MSS	S	MSS	S	S	MRMS	MRMS	S		SVS
Combat <sup>db</sup>	S	MRMS-S	MRMS	R	MRMS	S	MRMS-MS	MRMS	S (P)	MR	SVS
Commander <sup>db</sup>	MS	MRMS-S	MSS	RMR	MSS	S	MRMS-MS	MRMS		R	SVS
Commodus <sup>db</sup> CL	MSS	MRMS-S	MSS	RMR	S	S	MRMS-MS	MRMS	MS	R	SVS
Compass <sup>db</sup>	MS	MRMS-S	MSS	R	S	MSS	MSS	MRMS	S	R	SVS
Cyclops <sup>db</sup>	MRMS	MR-MS	MSS	R	S	MSS	S	MRMS	MSS (P)	S	SVS
Fairview <sup>db</sup>	S	MRMS-SVS	MSS	R	S	MSS	MRMS	MR			SVS
Fandaga <sup>db</sup>	SVS	R-MRMS	MSS	RMR	MS	MSS	MS	MR	MS (P)	R	VS
Fathom <sup>db</sup>	MR	MS-S	MR	MR	MS	SVS	MS	MRMS	MSS	R	SVS
Flinders <sup>db</sup>	MSS	MR-S	S	RMR	MS	MSS	MRMS-MS	MRMS	MSS (P)	S	SVS
Keel	MS	MRMS-S	MR	R-MRMS	SVS	S	MRMS-MS	MS		R	SVS
Kiwi	S	MRMS-MS	S	RMR	MS	MSS	MRMS-MS	MRMS		S	VS
La Trobe <sup>db</sup>	MR	MRMS-S	MSS	MS	MSS	S	S	MRMS	S	R	SVS
Laperouse <sup>db</sup>	S	MRMS-S	MS	RMR	MSS	S	MRMS	MRMS	MS	S	VS
Leabrook <sup>db</sup>	MSS	MRMS-S	MSS	RMR	S	S	MSS	MRMS	MS	RMR	VS
Litmus <sup>db</sup>	S	MRMS-S	S	R	S	S	S	MS	MSS (P)	MS	VS
Maximus <sup>db</sup> CL	MR	MRMS-S	MSS	RMR/S	MSS	S	MRMS	MRMS	S	R	VS
Minotaur <sup>db</sup>	VS	MRMS	S	S	S	MSS	S	MRMS	MS (P)	R	SVS
Neo <sup>db</sup> CL	MR (P)	MRMS-S (P)	MRMS (P)	R (P)	MSS (P)		MRMS (P)	RMR (P)	S (P)	R	SVS (P)
RGT Planet <sup>db</sup>	MR	MRMS-SVS	S	R	MRMS	MSS	MRMS	MRMS	MS	R (P)	SVS
Rosalind <sup>db</sup>	MSS	MR-S	S	MSS	MR	S	MRMS-MS	MRMS	MSS	R	VS
SakuraStar	MS	MRMS-S	MS	RMR	S	S	MRMS	MR	-	R	SVS
Scope CL <sup>db</sup>	MS	MRMS-S	MSS	RMR	MSS	S	MRMS	MRMS	MRMS	S	SVS
Spartacus CL <sup>db</sup>	RMR	MRMS-S	S	MS	MSS	S	S	MRMS	MSS	R	VS
Spinnaker <sup>db</sup>	MR	MRMS-SVS	S	R	MS	S	MRMS	MR	MS (P)	S	VS
Titan AX <sup>db</sup>	S	MRMS-S	MSS	RMR	S	S	MS	MR	S (P)	MR (P)	VS
Topstart	MSS	MRMS-S	MSS	R	MS	MSS	MRMS	RMR		S	SVS
Urambie	RMR	MRMS	MSS	MRMS-MSS	MSS	MSS	MRMS	MRMS			VS
Westminster <sup>db</sup>	MR	MRMS-MSS	MSS	RMR	MRMS	MSS	MRMS-MS	MRMS			SVS
Yeti <sup>db</sup>	SVS	MR-S	MS	MR	S	S	MS	MR		RMR	VS
Zena <sup>db</sup> CL	MR	MRMS-SVS	S	R	MS	S	MRMS-MS	MRMS	MS (P)	R	VS

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

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant,

MI = moderately intolerant, I = intolerant, VI = very intolerant, (P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences,

<sup>a</sup> line contains a few susceptible off types.

WHEAT  
BARLEY  
OAT  
CANOLA  
CHICKPEA  
FIELD PEA  
LENTIL  
LUPIN

# 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>®</sup>	InterGrain	3.65	Archer <sup>®</sup> is a mid-maturing, single-gene imidazolinone-tolerant oat hay variety. Sentry <sup>®</sup> is registered for pre-planting incorporation by seeding (IBS) for hay, forage, seed and grain (domestic feed market only) production for Archer <sup>®</sup> . Excess grain, seed and screenings produced from single-gene imidazolinone oat hay varieties Kingbale <sup>®</sup> and Archer <sup>®</sup> can be used for the domestic oat grain feed markets and/or consumed on-farm. Grain of these varieties cannot be delivered into bulk handling systems.
Kingbale <sup>®</sup>	InterGrain	3.65	Kingbale <sup>®</sup> is a mid-slow maturing, single-gene imidazolinone-tolerant oat hay variety. Sentry <sup>®</sup> is registered for pre-planting incorporation by seeding (IBS) for hay, forage, seed and grain (domestic feed market only) production for Kingbale <sup>®</sup> . Excess grain, seed and screenings produced from Kingbale <sup>®</sup> and Archer <sup>®</sup> can be used for the domestic oat grain feed markets and/or consumed on-farm. Grain of these varieties cannot be delivered into bulk handling systems.
Kultarr <sup>®</sup>	InterGrain	3.00	Kultarr <sup>®</sup> is a quick-mid maturing oat hay suitable for low-medium production areas. Kultarr <sup>®</sup> has a tall plant height and a suitable hay quality profile for export hay.
Wallaby <sup>®</sup>	InterGrain	3.00	Wallaby <sup>®</sup> is a mid-maturing oat hay well suited to medium and high production areas. Wallaby <sup>®</sup> has excellent hay yields.

\* 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)

## Oat variety yield performance – Kwinana West

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: Corrigin oat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.63	0.95	4.11	5.32	4.25
13008-18			111	106	110
Wandering	110	97	107	104	108
Bannister <sup>db</sup>	104	95	108	106	104
Bilby <sup>db</sup>	104	120	105	101	107
Koala <sup>db</sup>	98	73	110	110	98
Archer <sup>db*</sup>					108
Williams <sup>db</sup>	108	71	100	101	104
Wallaby <sup>db</sup>					97
Kojonup <sup>db</sup>	89	61	105	102	100
Durack <sup>db</sup>	97	114	84	90	93
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>18 May</b>	<b>12 May</b>	<b>11 May</b>
<b>Rainfall J–M (mm)</b>	<b>29</b>	<b>66</b>	<b>64</b>	<b>44</b>	<b>58</b>
<b>Rainfall A–O (mm)</b>	<b>244</b>	<b>167</b>	<b>397</b>	<b>377</b>	<b>272</b>

Special thanks to 2023 trial cooperater, Adam Rendell.

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

**Table 2: Cunderdin oat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.23	2.90	4.07	4.42	2.75
13008-18			111	106	120
Bilby <sup>db</sup>	111	109	108	103	108
Wandering	113	104	104	101	112
Bannister <sup>db</sup>	102	101	105	102	109
Koala <sup>db</sup>	85	90	103	102	105
Williams <sup>db</sup>	103	94	95	96	103
Durack <sup>db</sup>	106	104	89	96	87
Wallaby <sup>db</sup>					91
Archer <sup>db*</sup>					103
Kojonup <sup>db</sup>	66	78	103	99	91
<b>Sowing date</b>	<b>7 Jun</b>	<b>28 May</b>	<b>16 May</b>	<b>28 May</b>	<b>3 May</b>
<b>Rainfall J–M (mm)</b>	<b>6</b>	<b>98</b>	<b>113</b>	<b>52</b>	<b>51</b>
<b>Rainfall A–O (mm)</b>	<b>199</b>	<b>136</b>	<b>282</b>	<b>304</b>	<b>201</b>

Special thanks to 2023 trial cooperater.

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

**Table 3: Dandaragan oat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	4.23	3.90	3.34	3.14	3.13
13008-18			107	110	109
Wandering	110	110	106	105	109
Archer <sup>db*</sup>					115
Bilby <sup>db</sup>	105	110	108	107	105
Williams <sup>db</sup>	109	103	101	97	106
Bannister <sup>db</sup>	102	104	102	104	106
Kojonup <sup>db</sup>	91	91	106	101	106
Koala <sup>db</sup>	93	95	97	101	105
Wallaby <sup>db</sup>					103
Durack <sup>db</sup>	100	95	92	91	87
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>17 May</b>	<b>20 May</b>	<b>23 May</b>
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>77</b>	<b>84</b>	<b>40</b>	<b>25</b>
<b>Rainfall A–O (mm)</b>	<b>241</b>	<b>220</b>	<b>455</b>	<b>576</b>	<b>257</b>

Special thanks to 2023 trial cooperater.

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

**Table 4: Williams oat.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.71	4.24	5.58	4.00
Archer <sup>db*</sup>					104
Koala <sup>db</sup>		105	113	121	97
13008-18			111	104	112
Wandering		110	110	107	108
Bannister <sup>db</sup>		107	110	111	103
Williams <sup>db</sup>		106	108	108	101
Bilby <sup>db</sup>		104	101	97	108
Kojonup <sup>db</sup>		96	97	111	97
Wallaby <sup>db</sup>					95
Kultarr <sup>db</sup>					84
<b>Sowing date</b>		<b>25 May</b>	<b>3 Jun</b>	<b>12 May</b>	<b>11 May</b>
<b>Rainfall J–M (mm)</b>		<b>40</b>	<b>85</b>	<b>10</b>	<b>72</b>
<b>Rainfall A–O (mm)</b>		<b>288</b>	<b>519</b>	<b>384</b>	<b>330</b>

Special thanks to 2023 trial cooperater, Simon Harding.

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

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Table 5: York oat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.76	2.28	4.73	4.59	4.87
13008-18			107	118	112
Wandering	105	103	101	115	107
Bannister <sup>db</sup>	102	108	101	118	102
Koala <sup>db</sup>	96	110	98	126	95
Bilby <sup>db</sup>	107	101	107	101	107
Williams <sup>db</sup>	99	95	93	110	102
Archer <sup>db*</sup>					101
Wallaby <sup>db</sup>					90
Kojonup <sup>db</sup>	95	83	102	101	92
Durack <sup>db</sup>	97	93	95	72	97
<b>Sowing date</b>	<b>7 Jun</b>	<b>28 May</b>	<b>13 May</b>	<b>25 Apr</b>	<b>24 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>4</b>	<b>54</b>	<b>92</b>	<b>9</b>	<b>69</b>
<b>Rainfall A–O (mm)</b>	<b>250</b>	<b>180</b>	<b>381</b>	<b>316</b>	<b>210</b>

Special thanks to 2023 trial cooperators.

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

## Oat variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of oat in Western Australia. These ratings are updated annually by crop pathologists and were released in March 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 6: 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)	MR (P)	S (P)	MSS (P)	SVS	
Bannister <sup>db</sup>	MSS	MR	MSS	MS	MS	MR
Bilby <sup>db</sup>	S	MRMS	SVS	S	S	S
Brusher <sup>db</sup>	MSS	MR	S	S	MSS	MR
Carrolup	MSS	VS	S	SVS	MRMS	VS
Durack <sup>db</sup>	S	MRMS	S	S	MS	MRMS
Echidna	SVS	SVS	S	MSS	MSS	MS
Goldie <sup>db</sup>	MS	MR	S	MS	MSS	MR
Kingbale <sup>db</sup>	MSS	S	MSS	MS	MRMS	R
Koala <sup>db</sup>	MSS	MR	MRMS	MSS	MS	R
Kojonup <sup>db</sup>	MSS	SVS	MSS	MS	MSS	VS
Kowari <sup>db</sup>	S	MR/MRMS	S	S	S	S
Kultarr <sup>db</sup>	MS (P)	MR (P)	SVS (P)	MSS (P)	MSS	
Mitika <sup>db</sup>	SVS	MRMS	S	SVS	S	VS
Mulgara <sup>db</sup>	S/MS	MR	MR	MSS	MSS	R
Tungoo <sup>db</sup>	MRMS#	MR	MRMS	MSS	MSS	MR
Wallaby <sup>db</sup>	MS (P)	RMR (P)	MS (P)	MS (P)	MRMS	
Wandering	MSS	VS	SVS	MSS	S	VS
Williams <sup>db</sup>	MSS	MR	MSS	MSS	MRMS	S
Wintaroo	MS#	S	MR	MS	MSS	R
Yallara <sup>db</sup>	MSS	MR	S	S	MRMS	R

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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## 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	5.50	Early, determinant, short TT open-pollinated variety suited to low-medium rainfall zones.
DG Drummond TF	Nutrien Ag Solutions Ltd	N/A	DG Drummond TF is a tall, mid-late maturing, glyphosate-tolerant hybrid with group H blackleg resistance. DG Drummond TF is suited to medium to high-rainfall areas.
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-MR' 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.
Monola® H524TT	Nuseed	N/A	Monola® H524TT is an early-mid maturing TT hybrid with excellent early vigour. It is Nuseed's second Monola TT hybrid with improved yield and oil profile. It has demonstrated competitive yield and oil content to commercial canola TT hybrids during trials and exhibits strong early vigour and good early biomass. Suited to medium to slow canola growing regions, Monola® H524TT demonstrates strong blackleg resistance and good harvestability. Limited commercial release in 2024.
PY323G	Pioneer Hi-Bred Aust	N/A	Pioneer® PY323G is an early maturing Optimum GLY® hybrid variety. Suited to early-mid and mid-season growing regions. Mid-fast phenology. Medium height. Blackleg resistance rating NA, resistance group NA. Tested in NVT trials 2023. Marketed by Pioneer Seeds.
PY422G	Pioneer Hi-Bred Aust	N/A	Pioneer® PY422G is an early-mid maturing Optimum GLY® hybrid variety. Suited to early-mid and mid-season growing regions. Mid-fast phenology. Medium height. Blackleg resistance rating NA, resistance group NA. Tested in NVT trials 2023. Marketed by Pioneer Seeds.
PY424GC	Pioneer Hi-Bred Aust	N/A	Variety description not supplied.
PY525G	Pioneer Hi-Bred Aust	N/A	Pioneer® PY525G is a mid-maturing Optimum GLY® hybrid variety. Suited to mid-season growing regions. Mid-phenology. Medium-tall height. Blackleg resistance rating NA, resistance group NA. Tested in NVT trials 2023. Marketed by Pioneer Seeds.

\* 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 West

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: Bolgart med-high rainfall GLY.**

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.25			3.44	2.53		
Nuseed® Hunter TF		Compromised trial	Compromised trial	106	108		
Hyola® Regiment XC						109	
InVigor® LR 4540P					104	106	
InVigor® R 4520P	111				105	103	
Pioneer® 45Y28 RR					105	105	
Nuseed® Raptor TF	101				103	107	
Pioneer® 44Y30 RR					103	104	
PY323G							106
Nuseed® Eagle TF						105	104
Pioneer® 44Y27 (RR)	105					100	106
<b>Sowing date</b>	<b>7 Jun</b>	<b>6 May</b>	<b>4 May</b>	<b>26 Apr</b>	<b>6 May</b>		
<b>Rainfall J–M (mm)</b>	<b>0</b>	<b>49</b>	<b>122</b>	<b>52</b>	<b>51</b>		
<b>Rainfall A–O (mm)</b>	<b>270</b>	<b>185</b>	<b>353</b>	<b>371</b>	<b>210</b>		

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

**Table 2: Cunderdin med-high rainfall GLY.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.86	0.84	2.21	2.63	1.97
InVigor® LR 4540P				106	109
Nuseed® Hunter TF			114	109	111
Pioneer® 44Y27 (RR)	104	123	114	107	110
PY323G					109
Hyola® Regiment XC			101		109
Nuseed® Raptor TF	101	111	106	108	109
Pioneer® 44Y30 RR			111	103	106
InVigor® R 4520P	114	104	109	101	103
InVigor® R 4022P	110	112	108	100	100
DG Lofty TF			109	101	102
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>7 May</b>	<b>26 Apr</b>	<b>22 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>6</b>	<b>98</b>	<b>83</b>	<b>59</b>	<b>52</b>
<b>Rainfall A–O (mm)</b>	<b>199</b>	<b>136</b>	<b>292</b>	<b>312</b>	<b>194</b>

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

**Table 3: Dandaragan med-high rainfall GLY.**

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	2.82		3.53		2.85		
InVigor® R 4520P	107	Compromised trial	112	Compromised trial	109		
Nuseed® Hunter TF						108	
InVigor® LR 4540P						106	
Hyola® Regiment XC					106	109	
Pioneer® 45Y28 RR					107	109	
Nuseed® Eagle TF					106	108	
Pioneer® 44Y30 RR					108	105	
Nuseed® Raptor TF	103				103	104	
PY323G							101
Pioneer® 44Y27 (RR)	102				103		100
<b>Sowing date</b>	<b>24 May</b>	<b>12 Jun</b>	<b>16 Apr</b>	<b>26 Apr</b>	<b>6 May</b>		
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>77</b>	<b>84</b>	<b>40</b>	<b>25</b>		
<b>Rainfall A–O (mm)</b>	<b>241</b>	<b>220</b>	<b>455</b>	<b>576</b>	<b>257</b>		

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

**Table 4: Williams med-high rainfall GLY.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.20	3.64			2.63
InVigor® LR 4540P				Compromised trial	106
InVigor® R 4520P	116	107			105
Nuseed® Hunter TF					107
Pioneer® 44Y30 RR		107			105
Hyola® Regiment XC					104
Pioneer® 45Y28 RR		103			105
PY323G					104
InVigor® R 4022P	107	103			100
Pioneer® 44Y27 (RR)	97	106			104
Nuseed® Eagle TF					104
<b>Sowing date</b>	<b>16 May</b>	<b>6 May</b>	<b>29 Apr</b>	<b>12 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>37</b>	<b>40</b>	<b>93</b>	<b>18</b>	<b>42</b>
<b>Rainfall A–O (mm)</b>	<b>335</b>	<b>288</b>	<b>544</b>	<b>445</b>	<b>312</b>

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

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Table 5: York med-high rainfall GLY.

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)			2.81	3.12	2.78	
Nuseed® Hunter TF	No trial	Compromised trial		109	110	
InVigor® LR 4540P				110	108	
Pioneer® 44Y27 (RR)			103	107	110	
PY323G					109	
Pioneer® 44Y30 RR			105	106	106	
Hyola® Regiment XC			102	106	109	
Nuseed® Raptor TF			102	105	110	
Pioneer® 45Y28 RR			105	103	106	
InVigor® R 4520P			106	105	102	
Nuseed® Eagle TF					102	105
<b>Sowing date</b>				<b>6 Jun</b>	<b>4 May</b>	<b>12 May</b>
<b>Rainfall J–M (mm)</b>		<b>54</b>	<b>127</b>	<b>13</b>	<b>61</b>	
<b>Rainfall A–O (mm)</b>		<b>180</b>	<b>390</b>	<b>373</b>	<b>228</b>	

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

Table 6: Buntine low-med rainfall GLY.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.82	2.22	2.51		
Nuseed® Emu TF	144	114	103	No trial	No trial
Nuseed® Hunter TF			108		
Pioneer® 44Y27 (RR)	107	105	107		
Nuseed® Raptor TF	85	107	105		
Hyola® Regiment XC			100		
Hyola® Battalion XC		104	99		
Hyola® 410XX	100	110	90		
Pioneer® 44Y30 RR			102		
InVigor® R 3520	109	93	98		
DG Lofty TF			99		
<b>Sowing date</b>	<b>7 Jun</b>	<b>6 May</b>	<b>7 May</b>		
<b>Rainfall J–M (mm)</b>	<b>9</b>	<b>113</b>	<b>115</b>		
<b>Rainfall A–O (mm)</b>	<b>173</b>	<b>149</b>	<b>331</b>		

No 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

Table 7: Dalwallinu low-med rainfall GLY.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)				1.55	
Nuseed® Emu TF	No trial	No trial	No trial	122	Compromised trial
Pioneer® 44Y27 (RR)				112	
Nuseed® Hunter TF				111	
Hyola® Battalion XC				105	
Nuseed® Raptor TF				103	
InVigor® LR 4540P				103	
DG Lofty TF				100	
Pioneer® 44Y30 RR				99	
InVigor® R 4022P				99	
InVigor® R 4520P				93	
<b>Sowing date</b>					
<b>Rainfall J–M (mm)</b>				<b>121</b>	<b>41</b>
<b>Rainfall A–O (mm)</b>				<b>306</b>	<b>108</b>

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

Table 8: Yealering low-med rainfall GLY.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		2.03		3.05	1.93
Nuseed® Hunter TF	No trial	Compromised trial		110	106
InVigor® LR 4540P				109	107
PY424GC					104
InVigor® R 4520P			106	106	107
Nuseed® Emu TF			116	99	102
Pioneer® 44Y27 (RR)			107	104	102
PY323G					103
InVigor® R 4022P			104	101	102
Pioneer® 44Y30 RR				104	102
Hyola® Regiment XC					102
<b>Sowing date</b>				<b>5 May</b>	<b>28 Apr</b>
<b>Rainfall J–M (mm)</b>		<b>63</b>	<b>68</b>	<b>26</b>	<b>42</b>
<b>Rainfall A–O (mm)</b>		<b>177</b>	<b>384</b>	<b>317</b>	<b>270</b>

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

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**Table 9: Bolgart med-high rainfall TT.**

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.16			3.53	2.23	
HyTTec® Trifecta	108	Compromised trial	Compromised trial	111	112	
HyTTec® Trophy	109			108	112	
Hyola® Blazer TT				109	110	
InVigor® T 4510	110			105	108	
InVigor® T 4511				106	107	
SF Dynatron TT	108			105	106	
PY520TC					107	
Hyola® Enforcer CT					105	107
Hyola® Defender CT					105	105
RGT Capacity TT					104	102
<b>Sowing date</b>	<b>7 Jun</b>	<b>6 May</b>	<b>4 May</b>	<b>26 Apr</b>	<b>6 May</b>	
<b>Rainfall J–M (mm)</b>	<b>0</b>	<b>49</b>	<b>122</b>	<b>52</b>	<b>51</b>	
<b>Rainfall A–O (mm)</b>	<b>270</b>	<b>185</b>	<b>353</b>	<b>371</b>	<b>210</b>	

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

**Table 10: Cunderdin med-high rainfall TT.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.88		1.80	3.04	1.89
HyTTec® Trophy	110	Trial failed	116	108	114
InVigor® T 4510	111		116	106	110
HyTTec® Trifecta				107	112
InVigor® T 4511			111	105	108
Hyola® Enforcer CT			104	108	107
Hyola® Blazer TT			109	103	110
SF Dynatron TT	105		112	101	107
InVigor® LT 4530P			111	101	101
SF Spark TT			104	103	103
PY520TC					106
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>7 May</b>	<b>26 Apr</b>	<b>22 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>6</b>	<b>98</b>	<b>83</b>	<b>59</b>	<b>52</b>
<b>Rainfall A–O (mm)</b>	<b>199</b>	<b>136</b>	<b>292</b>	<b>312</b>	<b>194</b>

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

**Table 11: Dandaragan med-high rainfall TT.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.65		3.17		2.42
HyTTec® Trifecta	111	Compromised trial		Compromised trial	121
Hyola® Blazer TT			118		120
HyTTec® Trophy	109		116		115
PY520TC			113		115
SF Dynatron TT	105		114		112
Hyola® Defender CT					114
InVigor® T 4511			111		110
InVigor® T 4510	107		111		108
RGT Baseline® TT					113
RGT Capacity TT					109
<b>Sowing date</b>	<b>24 May</b>	<b>12 Jun</b>	<b>16 Apr</b>	<b>26 Apr</b>	<b>6 May</b>
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>77</b>	<b>84</b>	<b>40</b>	<b>25</b>
<b>Rainfall A–O (mm)</b>	<b>241</b>	<b>220</b>	<b>455</b>	<b>576</b>	<b>257</b>

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

**Table 12: Williams med-high rainfall TT.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.32	3.34			2.46
HyTTec® Trifecta	115	109	Trial failed	Compromised trial	111
Hyola® Blazer TT		110			111
HyTTec® Trophy	109	110			110
SF Dynatron TT		109			108
InVigor® T 4510	108	108			107
PY520TC					109
Hyola® Defender CT					108
InVigor® T 4511					106
RGT Capacity TT	109	104			104
RGT Baseline® TT					105
<b>Sowing date</b>	<b>16 May</b>	<b>6 May</b>	<b>29 Apr</b>	<b>12 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>37</b>	<b>40</b>	<b>93</b>	<b>18</b>	<b>42</b>
<b>Rainfall A–O (mm)</b>	<b>335</b>	<b>288</b>	<b>544</b>	<b>445</b>	<b>312</b>

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

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

**Table 13: York med-high rainfall TT.**

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)			2.72	2.73	2.50		
HyITec® Trophy	No trial	Compromised trial	109	112	116		
HyITec® Trifecta			110	110	114		
Hyola® Blazer TT			111	109	112		
InVigor® T 4510			106	110	110		
SF Dynatron TT			108	107	108		
InVigor® T 4511			106	108	109		
PY520TC				105	109		
Hyola® Defender CT				104	107		
Monola® H524TT				102	107		
RGT Capacity TT				105	103	101	
<b>Sowing date</b>				<b>6 Jun</b>	<b>4 May</b>	<b>12 May</b>	<b>17 Apr</b>
<b>Rainfall J–M (mm)</b>				<b>54</b>	<b>127</b>	<b>13</b>	<b>61</b>
<b>Rainfall A–O (mm)</b>		<b>180</b>	<b>390</b>	<b>373</b>	<b>228</b>		

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

**Table 14: Buntine low-med rainfall TT.**

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.85	2.26	2.11				
HyITec® Trident	118	119	118	No trial	No trial		
HyITec® Velocity			112				
InVigor® T 4510	113	107	111				
InVigor® T 4511			107				
RGT Capacity TT	106	109	102				
SF Spark TT	108	107	103				
SF Dynatron TT	98	104	110				
Bandit TT <sup>ϕ</sup>			101				
InVigor® LT 4530P		92	107				
AFP Cutubury <sup>ϕ</sup>			88				
<b>Sowing date</b>	<b>7 Jun</b>	<b>6 May</b>	<b>7 May</b>				
<b>Rainfall J–M (mm)</b>	<b>9</b>	<b>113</b>	<b>115</b>				
<b>Rainfall A–O (mm)</b>	<b>173</b>	<b>149</b>	<b>331</b>				

No 2023 trial cooperator.  
Learn more via the [NVT Long Term Yield Reporter](#)

**Table 15: Dalwallinu low-med rainfall TT.**

Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)				2.87					
HyITec® Trident	No trial	No trial	No trial	113	Compromised trial				
HyITec® Velocity				112					
InVigor® T 4510				109					
HyITec® Trophy				107					
DG Avon TT				106					
InVigor® T 4511				105					
SF Spark TT				104					
Bandit TT <sup>ϕ</sup>				103					
InVigor® LT 4530P				103					
SF Dynatron TT				103					
<b>Sowing date</b>								<b>19 Apr</b>	<b>31 May</b>
<b>Rainfall J–M (mm)</b>								<b>121</b>	<b>41</b>
<b>Rainfall A–O (mm)</b>				<b>306</b>	<b>108</b>				

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

**Table 16: Yealering low-med rainfall TT.**

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		1.82		2.96	2.04		
HyITec® Velocity	No trial	Compromised trial		112	109		
HyITec® Trident			116	115	108		
HyITec® Trophy			110	112	107		
SF Dynatron TT			106	113	108		
Hyola® Blazer TT			106	112	108		
InVigor® T 4510			111	109	105		
RGT Baseline® TT				107	105		
InVigor® LT 4530P			106	107	104		
RGT Capacity TT			105	104	103		
Hyola® Defender CT				106	105		
<b>Sowing date</b>				<b>5 May</b>	<b>28 Apr</b>	<b>12 May</b>	<b>20 Apr</b>
<b>Rainfall J–M (mm)</b>				<b>63</b>	<b>68</b>	<b>26</b>	<b>42</b>
<b>Rainfall A–O (mm)</b>		<b>177</b>	<b>384</b>	<b>317</b>	<b>270</b>		

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

WHEAT

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CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

## 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 17: Canola disease guide – 2024 autumn blackleg ratings and resistance groups.**

Variety	2024 Blackleg rating Bare	2024 Blackleg rating ILeVo®	2024 Blackleg rating Saltro®	Type	Section A – resistance group of cultivar	Section B – resistance group of previous year’s cultivar (stubble)																					
						A	B	C	AB	AC	AD	ABC	ABD	ABF	ABS	ABDF	ABDS	ADF	BF	BC	H	AH	ACH	ABH	ADFH		
<b>CONVENTIONAL VARIETIES</b>																											
Outlaw <sup>Ⓛ</sup>	RMR			Open pollinated	A																						
Nuseed® Quartz	RMR			Hybrid	ABD																						
Nuseed® Diamond	RMR	R	R	Hybrid	ABF																						
<b>TRIAZINE-TOLERANT VARIETIES</b>																											
HyTTec® Trifecta	R			Hybrid	ABD																						
HyTTec® Trident	R			Hybrid	AD																						
Monola® H524TT	R			High stability oil, hybrid	AD																						
DG Bidgee TT <sup>Ⓛ</sup>	R	R	R	Open pollinated	H																						
HyTTec® Trophy	R	R	R	Hybrid	AD																						
DG Torrens TT <sup>Ⓛ</sup>	RMR			Open pollinated	H																						
Hyola® Blazer TT	RMR		R	Hybrid	ADF																						
InVigor® T 4511	RMR	R		Hybrid	Different blackleg resistance pattern, further testing required. Effective rotation with existing groups currently unknown																						
Monola® H421TT	RMR			High stability oil, hybrid	BC																						
ATR-Bluefin <sup>Ⓛ</sup>	RMR			Open pollinated	AB																						
DG Avon TT <sup>Ⓛ</sup>	MR	R	R	Open pollinated	AC																						
SF Spark™ TT	MR	R	R	Hybrid	ABDS																						
InVigor® T 4510	MR	R	R	Hybrid	BF																						
Renegade TT <sup>Ⓛ</sup>	MR			Open pollinated	A																						
HyTTec® Velocity	MR			Hybrid	AB																						
Monola® 422TT	MRMS			Open pollinated	BC																						
ATR-Swordfish <sup>Ⓛ</sup>	MRMS			Open pollinated	AB																						
SF Dynatron™ TT	MRMS	R	R	Hybrid	BC																						
RGT Baseline™ TT	MRMS	R	R	Hybrid	B																						
Bandit TT <sup>Ⓛ</sup>	MRMS	R	R	Open pollinated	A																						
RGT Capacity™ TT	MRMS	RMR	R	Hybrid	B																						
AFP Cutubury <sup>Ⓛ</sup>	MS	MR	RMR	Open pollinated	AB																						
ATR-Bonito <sup>Ⓛ</sup>	MS	RMR	R	Open pollinated	A																						

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Table 17: Canola disease guide – 2024 autumn blackleg ratings and resistance groups (continued).

Variety	2024 Blackleg rating Bare	2024 Blackleg rating iLeVo®	2024 Blackleg rating Saltro®	Type	Section A – resistance group of cultivar	Section B – resistance group of previous year’s cultivar (stubble)																				
						A	B	C	AB	AC	AD	ABC	ABD	ABF	ABS	ABDF	ABDS	ADF	BF	BC	H	AH	ACH	ABH	ADFH	
<b>IMIDAZOLINONE-TOLERANT VARIETIES</b>																										
Hyola® Continuum CL	R		R	Hybrid, Clearfield®	ADF																					
Hyola® Solstice CL	R		R	Hybrid, Clearfield®	ADFH																					
Captain CL	R			Winter, hybrid, Clearfield®	AH																					
Hyola® Feast CL	R		R	Winter, hybrid, Clearfield®	H																					
RGT Nizza™ CL	R			Winter, hybrid, Clearfield®	B																					
Hyola® 970CL	R		R	Winter, hybrid, Clearfield®	H																					
Phoenix CL	R			Winter, hybrid, Clearfield®	B																					
Pioneer® 45Y93 CL	R		R	Hybrid, Clearfield®	BC																					
RGT Clavier™ CL	R			Winter, hybrid, Clearfield®	ACH																					
Pioneer® PN526C	RMR			High stability oil, Hybrid, Clearfield®	ABD																					
Pioneer® 45Y95 CL	RMR		R	Hybrid, Clearfield®	C																					
Nuseed® Ceres IMI	RMR			Hybrid	AD																					
Pioneer® 43Y92 CL	RMR		R	Hybrid, Clearfield®	B																					
Pioneer® 44Y94 CL	RMR		R	Hybrid, Clearfield®	BC																					
Pioneer® PY421C	RMR		R	Hybrid, Clearfield®	A																					
VICTORY® V75-03CL	RMR			High stability oil, hybrid, Clearfield®	AB																					
<b>IMIDAZOLINONE AND TRIAZINE-TOLERANT VARIETIES</b>																										
Hyola® Defender CT	R		R	Hybrid, Clearfield®, Triazine	ADF																					
Hyola® Enforcer CT	R			Hybrid, Clearfield®, Triazine	ADF																					
Pioneer® PY520 TC	MR		R	Hybrid, Clearfield®, Triazine	BC																					
<b>GLYPHOSATE-TOLERANT VARIETIES</b>																										
DG Hotham TF	R			Hybrid, TruFlex®	ABH																					
Nuseed® Raptor TF	R			Hybrid, TruFlex®	AD																					
Nuseed® Eagle TF	R			Hybrid, TruFlex®	ABD																					
VICTORY® V55-04TF	R		R	High stability oil, hybrid, TruFlex®	AB																					
DG Lofty TF	R			Hybrid, TruFlex®	ABH																					
Nuseed® Hunter TF	RMR			Hybrid, TruFlex®	AB																					
Pioneer® 45Y28 RR	RMR		R	Hybrid, Roundup Ready®	BC																					
Pioneer® 44Y27 RR	RMR		R	Hybrid, Roundup Ready®	B																					
Pioneer® 44Y30 RR	RMR		R	Hybrid, Roundup Ready®	AB																					
Pioneer® PY422G	MR		R	Hybrid, Optimum GLY®	AB																					
Nuseed® Emu TF	MR			Hybrid, TruFlex®	AB																					
Pioneer® PY525G	MR		R	Hybrid, Optimum GLY®	AB																					

Continued on next page



**Table 17: Canola disease guide – 2024 autumn blackleg ratings and resistance groups (continued).**

Variety	2024 Blackleg rating Bare	2024 Blackleg rating ILeVo®	2024 Blackleg rating Saltro®	Type	Section A – resistance group of cultivar	Section B – resistance group of previous year’s cultivar (stubble)																
						A	B	C	AB	AC	AD	ABC	ABD	ABF	ABS	ABDF	ABDS	ADF	BF	BC	H	AH
<b>GLYPHOSATE-TOLERANT VARIETIES</b>																						
InVigor® R 4022P	MRMS	R		Hybrid, TruFlex®	ABC																	
InVigor® R 4520P	MRMS	R		Hybrid, TruFlex®	B																	
Pioneer® PY323G	MRMS		R	Hybrid, Optimum GLY®	BC																	
<b>GLYPHOSATE AND IMIDAZOLINONE-TOLERANT VARIETIES</b>																						
Hyola® Regiment XC	R		R	Hybrid, TruFlex®, Clearfield®	ADFH																	
Hyola® Battalion XC	RMR			Hybrid, TruFlex®, Clearfield®	ADF																	
Hyola® Garrison XC	RMR		R	Hybrid, TruFlex®, Clearfield®	ADF																	
<b>GLUFOSINATE AND TRIAZINE-TOLERANT VARIETIES</b>																						
InVigor® LT 4530P	RMR	R		Hybrid, LibertyLink®, Triazine	BF																	
<b>GLUFOSINATE AND GLYPHOSATE-TOLERANT VARIETIES</b>																						
InVigor® LR 4540P	RMR	R		Hybrid, LibertyLink®, TruFlex®	B																	

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

**Section B:**   
■ Green = best possible rotation (no resistance genes in common)   
■ Yellow = okay rotation (at least one resistance gene not in common)   
■ Red = not advised (all resistance genes in common)

Please check updated ratings using the [Blackleg Management Guide](#) or the [NVT Disease Ratings](#).

# CHICKPEA

## Chickpea variety yield performance – Kwinana West

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.

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)		0.74	1.31	1.20	0.55	
PBA Slasher <sup>Ⓛ</sup>	No trial	106	107	107	103	
PBA Striker <sup>Ⓛ</sup>		110	103	106	109	
CBA Captain <sup>Ⓛ</sup>		108	101	93	107	
Neelam <sup>Ⓛ</sup>		100	98	100	101	
PBA Maiden <sup>Ⓛ</sup>		101	94	98	106	
Genesis™ 836		93	95	99	95	
PBA Seamer <sup>Ⓛ</sup>				92		
Genesis™ 090		76	77	98	85	
Sowing date			28 May	4 Jun	8 Jun	31 May
Rainfall J–M (mm)			98	98	45	39
Rainfall A–O (mm)		136	311	295	215	

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

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)		0.86	1.81	1.04	0.31	
PBA Striker <sup>Ⓛ</sup>	No trial	99	107	113	126	
PBA Slasher <sup>Ⓛ</sup>		103	103	110	99	
Neelam <sup>Ⓛ</sup>		97	101	102	109	
CBA Captain <sup>Ⓛ</sup>		103	101	95	115	
PBA Maiden <sup>Ⓛ</sup>		92	100	102	123	
Genesis™ 836		96	98	96	94	
Genesis™ 090		82	101	89	114	
PBA Seamer <sup>Ⓛ</sup>				90		
Sowing date			27 May	20 May	1 Jun	31 May
Rainfall J–M (mm)			97	134	42	33
Rainfall A–O (mm)		161	331	250	139	

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

WHEAT

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OAT

CANOLA

CHICKPEA

FIELD PEA

LENTIL

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)

## 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 3: Chickpea disease guide for Western Australia.				
Variety	Ascochyta blight (pathogen group 2 – north)	2022-23 Phytophthora root rot	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN tolerance ( <i>Pratylenchus neglectus</i> )
<b>DESI</b>				
CBA Captain <sup>db</sup>	MS	S	MR	MT
Genesis™ 836	S		MR	MII
Kyabra <sup>db</sup>	VS	VS	MRMS	MT
Neelam <sup>db</sup>	S		MRMS	MI
PBA Boundary <sup>db</sup>	S	VS	RMR	MI
PBA Drummond <sup>db</sup>	VS	VS	MR	TMT
PBA HatTrick <sup>db</sup>	S	S	MRMS	MT
PBA Maiden <sup>db</sup>	S		MRMS	MI
PBA Pistol <sup>db</sup>	VS		RMR	T
PBA Seamer <sup>db</sup>	MS	S	MRMS	MI
PBA Slasher <sup>db</sup>	S		MRMS	MI
PBA Striker <sup>db</sup>	S		MRMS	MI
<b>KABULI</b>				
Almaz <sup>db</sup>	MS		MRMS	MII
Genesis™ 090	MS		MRMS	IVI
Genesis™ Kalkee	S		MRMS	VI
PBA Magnus <sup>db</sup>	MS		MR	MII
PBA Monarch <sup>db</sup>	MS		MRMS	I
PBA Royal <sup>db</sup>	MS		MR	VI

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 Kaspa-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 Kaspa 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.

WHEAT

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CANOLA

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FIELD PEA

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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 West

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: Dalwallinu field pea.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.93	2.34	2.31	0.95
APB Bondi <sup>Ⓛ</sup>	No trial	117	110	115	109
PBA Taylor <sup>Ⓛ</sup>		109	104	112	112
PBA Butler <sup>Ⓛ</sup>		106	107	107	107
PBA Wharton <sup>Ⓛ</sup>		108	100	108	109
PBA Twilight <sup>Ⓛ</sup>		104	97	102	103
PBA Gonyah <sup>Ⓛ</sup>		97	97	101	107
PBA Oura <sup>Ⓛ</sup>		97	102	95	100
Kaspa		95	95	101	104
GIA Kastar <sup>Ⓛ*</sup>		90	68	96	90
GIA Ourstar <sup>Ⓛ*</sup>		83	83	82	86
Sowing date		27 May	20 May	1 Jun	31 May
Rainfall J–M (mm)		97	134	42	33
Rainfall A–O (mm)		161	331	250	139

Special thanks to 2023 trial cooperator, HJ Hyde and Co.

\* 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 ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )
APB Bondi <sup>Ⓛ</sup>	S	RMR (S)	RMR	RMR	MSS
GIA Kastar <sup>Ⓛ</sup>	S	S	RMR	MR	MS
GIA Ourstar <sup>Ⓛ</sup>	S (P)	S	S	MRMS	MS
Kaspa	S	S	S	RMR	MRMS
PBA Butler <sup>Ⓛ</sup>	MS	S	S	RMR	MRMS
PBA Gonyah <sup>Ⓛ</sup>	S	S	S	RMR	MRMS
PBA Noosa <sup>Ⓛ</sup>	S	MS	S	RMR	MRMS
PBA Oura <sup>Ⓛ</sup>	MS	S	S	MR	MRMS
PBA Pearl	MS	S	S	MR	MRMS
PBA Percy	MRMS	S	S	RMR	RMR
PBA Taylor <sup>Ⓛ</sup>	S	S	S	RMR	MRMS
PBA Twilight <sup>Ⓛ</sup>	S	S	S	MR	MRMS
PBA Wharton <sup>Ⓛ</sup>	S	S	RMR	MR	MRMS
Sturt	MS	S	S	MR	MR

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.

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# LENTIL

## New lentil varieties

The following information is for lentil varieties released in the 12 months to the date when the MET analysis was published on NVT online. 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>
ALB Terrier <sup>Ⓓ</sup>	Agriculture Victoria	TBC	ALB Terrier <sup>Ⓓ</sup> is an imidazolinone herbicide tolerant, small market class red lentil with mid-flowering and maturity characteristics. It is rated RMR to pathotype two of Ascochyta, which is the best in its class. It is broadly adapted to various lentil growing regions of Australia.

\* 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)

## Lentil variety yield performance – Kwinana West

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: Dalwallinu lentil.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.52	1.71	1.89	0.65
GIA Thunder <sup>†*</sup>	No trial	118	119	112	117
ALB Terrier <sup>†</sup>			112	107	112
GIA Lightning <sup>†*</sup>		108	109	104	115
PBA Jumbo2 <sup>†</sup>		100	109	105	99
PBA HighlandXT <sup>†*</sup>		100	99	102	98
GIA Leader <sup>†*</sup>		95	101	96	99
PBA Hallmark XT <sup>†*</sup>		103	91	99	95
PBA Hurricane XT <sup>†*</sup>		94	100	97	97
PBA Bolt <sup>†</sup>		94	93	97	96
PBA Ace <sup>†</sup>		83		92	100
Sowing date		27 May	20 May	1 Jun	31 May
Rainfall J–M (mm)		97	134	42	33
Rainfall A–O (mm)		161	331	250	139

Special thanks to 2023 trial cooperator, H J Hyde and Co.

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

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## Lentil variety disease ratings – Western Australia

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

Variety	Ascochyta blight (Pathotype 2 PBA Hurricane XT <sup>Ⓛ</sup> virulent)	Ascochyta blight (Pathotype 1 Nipper <sup>Ⓛ</sup> virulent)	Botrytis grey mould	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )
ALB Terrier <sup>Ⓛ</sup>	MR (P)	R	MRMS (P)	MR	MR
GIA Leader <sup>Ⓛ</sup>	MR (P)	MR (P)	MRMS (P)	MRMS (P)	MR (P)
GIA Lightning <sup>Ⓛ</sup>	MRMS (P)	R (P)	MS (P)	MRMS (P)	MR (P)
GIA Metro <sup>Ⓛ</sup>	RMR (P)	MR (P)	MRMS (P)	MR (P)	MRMS (P)
GIA Sire <sup>Ⓛ</sup>	MRMS (P)	R (P)	MS (P)	MRMS (P)	MRMS (P)
GIA Thunder <sup>Ⓛ</sup>	MRMS (P)	R (P)	MRMS (P)	MR (P)	MR (P)
Nipper <sup>Ⓛ</sup>	MR	MRMS	MRMS	RMR	MR
PBA Ace <sup>Ⓛ</sup>	MR	R	MS	MR	MRMS
PBA Bolt <sup>Ⓛ</sup>	MRMS	MR	S	MR	MR
PBA Hallmark XT <sup>Ⓛ</sup>	MRMS	RMR	MRMS	MR	MRMS
PBA HighlandXT <sup>Ⓛ</sup>	MR (P)	MR	MS	MR	MRMS
PBA Hurricane XT <sup>Ⓛ</sup>	MRMS (P)	RMR	MS	MRMS	MRMS
PBA Jumbo2 <sup>Ⓛ</sup>	RMR	R	MR (P)	MR	MRMS
PBA KelpieXT <sup>Ⓛ</sup>	MRMS	MRMS	MS	MRMS	MRMS

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

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

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# 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	4.50	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	4.50	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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## Lupin variety yield performance – Kwinana West

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: Cunderdin narrow-leaf lupin.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.68	1.20	2.26	1.00	1.53
Rosemont <sup>db</sup>				120	111
Coyote <sup>db</sup>	126	106	111	124	110
Lawler <sup>db</sup>		104	108	113	107
PBA Jurien <sup>db</sup>	104	105		107	110
Gidgee <sup>db</sup>			108	109	105
PBA Bateman <sup>db</sup>	110	104	105	112	107
PBA Gunyidi <sup>db</sup>	103	102	101	105	103
Mandelup <sup>db</sup>	102	101	102	102	103
PBA Barlock <sup>db</sup>	93	101	101	97	104
Coromup <sup>db</sup>	111	97	95	105	91
<b>Sowing date</b>	<b>7 Jun</b>	<b>25 May</b>	<b>7 May</b>	<b>2 May</b>	<b>5 May</b>
<b>Rainfall J–M (mm)</b>	<b>6</b>	<b>98</b>	<b>83</b>	<b>59</b>	<b>52</b>
<b>Rainfall A–O (mm)</b>	<b>199</b>	<b>136</b>	<b>292</b>	<b>312</b>	<b>194</b>

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

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

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.85	1.79	4.05	1.86	2.09
Rosemont <sup>db</sup>				119	122
Coyote <sup>db</sup>	113	121	112	113	122
PBA Jurien <sup>db</sup>	106	116		115	113
Lawler <sup>db</sup>		116	104	111	114
PBA Bateman <sup>db</sup>	105	110	111	107	112
Gidgee <sup>db</sup>			98	113	112
PBA Gunyidi <sup>db</sup>	101	102	108	101	104
Mandelup <sup>db</sup>	102	105	101	104	104
PBA Barlock <sup>db</sup>	98	101	104	104	101
Coromup <sup>db</sup>	101	91	96	87	96
<b>Sowing date</b>	<b>24 May</b>	<b>8 May</b>	<b>26 Apr</b>	<b>1 May</b>	<b>6 May</b>
<b>Rainfall J–M (mm)</b>	<b>10</b>	<b>77</b>	<b>84</b>	<b>40</b>	<b>25</b>
<b>Rainfall A–O (mm)</b>	<b>241</b>	<b>220</b>	<b>455</b>	<b>576</b>	<b>257</b>

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

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

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.48	3.19	2.55	2.83	0.79
Coyote <sup>db</sup>	108	117	120	106	110
PBA Bateman <sup>db</sup>	103	113	119	109	106
Rosemont <sup>db</sup>				103	111
PBA Gunyidi <sup>db</sup>	100	108	116	108	102
PBA Jurien <sup>db</sup>	107	112		106	108
Lawler <sup>db</sup>		110	104	101	107
PBA Barlock <sup>db</sup>	100	105	104	107	102
Mandelup <sup>db</sup>	102	103	99	101	102
Gidgee <sup>db</sup>			90	96	106
Coromup <sup>db</sup>	96	92	106	92	95
<b>Sowing date</b>	<b>23 May</b>	<b>6 May</b>	<b>19 May</b>	<b>12 May</b>	<b>20 May</b>
<b>Rainfall J–M (mm)</b>	<b>15</b>	<b>45</b>	<b>78</b>	<b>18</b>	<b>50</b>
<b>Rainfall A–O (mm)</b>	<b>301</b>	<b>293</b>	<b>441</b>	<b>367</b>	<b>282</b>

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

**Table 4: Wongan Hills R.S. narrow-leaf lupin.**

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.32		2.59	2.29	0.97
Coyote <sup>db</sup>	124	Trial failed	107	121	105
Rosemont <sup>db</sup>				120	105
Lawler <sup>db</sup>			105	113	103
PBA Bateman <sup>db</sup>	113		107	107	104
PBA Jurien <sup>db</sup>	104			104	105
Gidgee <sup>db</sup>			105	112	102
PBA Gunyidi <sup>db</sup>	108		103	101	102
Mandelup <sup>db</sup>	101		103	102	101
PBA Barlock <sup>db</sup>	97		106	93	103
Coromup <sup>db</sup>	107		87	110	95
<b>Sowing date</b>	<b>7 Jun</b>	<b>1 May</b>	<b>4 May</b>	<b>12 May</b>	<b>15 May</b>
<b>Rainfall J–M (mm)</b>	<b>6</b>	<b>74</b>	<b>110</b>	<b>63</b>	<b>24</b>
<b>Rainfall A–O (mm)</b>	<b>235</b>	<b>205</b>	<b>292</b>	<b>320</b>	<b>144</b>

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

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## 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 5: Lupin disease guide for Western Australia.**

Variety	Anthraxnose resistance	Cucumber mosaic virus (CMV)	Phomopsis pod infection	Phomopsis stem infection	Sclerotinia stem rot
Coromup <sup>db</sup>	MR	MR	MS	MR	S (P)
Coyote <sup>db</sup>	MRMS	MRMS	MRMS	S	S (P)
Gidgee <sup>db</sup>	RMR	MRMS	S (P)	MR	S (P)
Jenabillup <sup>db</sup>	MS	MRMS	MR	MS	S (P)
Lawler <sup>db</sup>	MR	MRMS	MS	MR	S (P)
Mandelup <sup>db</sup>	MRMS	MRMS	S	MR	S (P)
PBA Barlock <sup>db</sup>	RMR	MRMS	MR	MR	S (P)
PBA Bateman <sup>db</sup>	MRMS	MR	MS	RMR	S (P)
PBA Gunyidi <sup>db</sup>	MRMS	MRMS	MRMS	RMR	S (P)
PBA Jurien <sup>db</sup>	RMR	MS	MRMS	RMR	S (P)
PBA Leeman <sup>db</sup>	MRMS	MRMS	MRMS	MR	S (P)
Rosemont <sup>db</sup>	MRMS	MR	MRMS (P)	MR	S (P)
Wonga	MR	MR	MR	MR	S (P)

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

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

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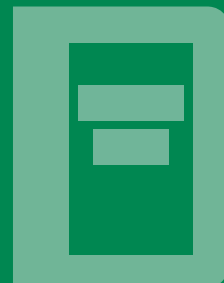
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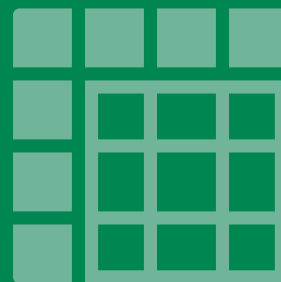
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