# NVT HARVEST REPORT



**MARCH 2024** 

### Geraldton Western Region

nvt.grdc.com.au





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> **COVER:** John Nairn, South Australian Research and Development Institute (SARDI-PIRSA), harvesting the barley National Variety Trial site at the SARDI Turretfield Research Centre, Rosedale, SA, 2023. **PHOTO:** Trevor Garnett, GRDC

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#### LEGEND: MEAN VARIETY YIELD PERFORMANCE

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

#### **DISEASE RATING COLOUR RANGE**

VS	SVS	S	MSS	MS	MRMS	MR	RMR	R
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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 <u>nvt.grdc.com.au/nvt-disease-ratings</u> to find the latest NVT disease ratings.

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



## INTRODUCTION

*The NVT Harvest Report - Geraldton* provides information to support growers and advisers with decisions on variety selection for **Geraldton**. 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 **Geraldton** 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 - Geraldton*, 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 **Geraldton**.

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

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

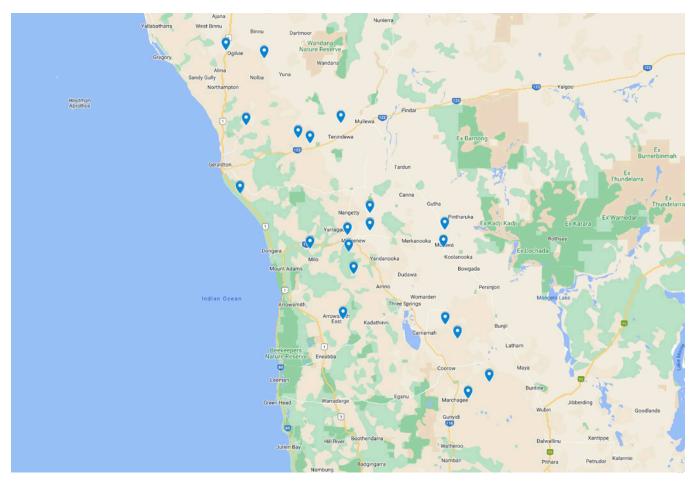
Refer to the latest *Crop Sowing Guide* for further information at **nvt.grdc.com.au/resources/crop-sowing-guides** 



#### **NVT SITE LOCATIONS – Geraldton**

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

SOURCE: NVT Online



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



## 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 <u>nvt.grdc.com.au</u> 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>(b</sup> CL Plus	InterGrain		TBC	Variety description not supplied.
Firefly <sup>⊕</sup>	InterGrain		4.00	Firefly <sup><math>\Phi</math></sup> is a high-yielding, mid-slow maturing ANW wheat, setting a new noodle yield benchmark for WA. Firefly <sup><math>\Phi</math></sup> is suited to late April through to early May sowings, being similar in maturity to Zen <sup><math>\Phi</math></sup> and Calingiri. Firefly <sup><math>\Phi</math></sup> has an effective disease resistance profile, including good stripe rust and yellow spot resistance. Firefly <sup><math>\Phi</math></sup> offers good physical grain characteristics, including good grain size.
Genie®	InterGrain		3.50	Genie <sup>(b)</sup> is a mid-slow maturing wheat and is an excellent alternative to RockStar <sup>(b)</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>(b)</sup> . Genie <sup>(b)</sup> , with its slightly later maturity than RockStar <sup>(b)</sup> and long coleoptile, enables earlier sowing opportunities to be maximised. Genie <sup>(b)</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>(b)</sup> has good sprouting tolerance. Genie <sup>(b)</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®	LongReach Plant Breeders		TBC	Variety description not supplied.
Thumper <sup>()</sup>	InterGrain		3.50	Thumper <sup>(b)</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>(b)</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>(b)</sup> offers good grain size, reducing screenings risk, and has adequate test weight. Thumper <sup>(b)</sup> is currently classified as APW in the western zone with an AH classification expected soon.
Tomahawk CL Plus <sup>()</sup>	Australian Grain Technologies		4.15	Scepter <sup>d-</sup> -type Clearfield <sup>®</sup> variety with increased yield over Scepter <sup>d-</sup> . The highest-yielding Clearfield <sup>®</sup> wheat variety in WA, South Australia and Victoria. Tolerant to Clearfield <sup>®</sup> Intervix <sup>®</sup> herbicide. Similar disease resistance profile to Scepter <sup>d-</sup> . Similar grain size and test weight as Scepter <sup>d-</sup> . Mid-season maturity, similar to Scepter <sup>d-</sup> . APW quality classification in South Australia, Victoria, southern NSW, classification for WA pending.

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

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



LUPIN

#### Wheat variety yield performance – Geraldton

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: Coorow main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.45	3.19	4.28	4.98	0.65	
Tomahawk CL Plus®*				108	128	
Vixen®	116	109	109	101	160	
Thumper®					95	
Calibre		104	102	109	135	
Devil®	112	104	105	111	108	
Brumby			106	111	100	
Sting®	115	106	105	102	151	
Scepter®	110	105	107	106	115	
LRPB Matador®				108	105	
Ballista <sup>(b)</sup>	112		99	111	120	
RockStar <sup>(b)</sup>	104	102	106	113	67	
Firefly <sup>(b)</sup>			102		82	
LRPB Havoc	103	107	111	94	135	
LRPB Avenger®	113	106		92	166	
Ninja <sup>®</sup>	102	102	104	109	81	
Sowing date	7 Jun	25 May	13 May	12 May	16 May	
Rainfall J–M (mm)	17	91	98	58	23	
Rainfall A–O (mm)	218	172	330	242	138	

Special thanks to 2023 trial cooperator, Clint Hunt.

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

Table 3: Eradu main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	0.33		2.07	3.69	2.05	
Tomahawk CL Plus®*				113	111	
RockStar <sup>(b)</sup>	97		110	112	109	
Brumby <sup>(b</sup>			113	109	109	
Vixen <sup>®</sup>	115		118	106	107	
Devil®	107		112	108	109	
Scepter	106	la	113	108	107	
LRPB Matador®		Compromised tria			108	
Thumper®		omis			112	
Calibre <sup>®</sup>		mpre	112	104	109	
Firefly <sup>(b)</sup>		ଥ	106		108	
Sting®	114		113	103	106	
Ninja®	97		106	107	106	
LRPB Havoc	103		112	105	101	
Kinsei <sup>®</sup>	94		102	107	106	
Denison <sup>(b</sup>			100	110	103	
Sowing date	7 Jun	25 May	26 May	21 May	10 May	
Rainfall J–M (mm)	3	63	79	46	69	
Rainfall A–O (mm)	270	201	343	329	151	

Special thanks to 2023 trial cooperator.

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

Table 2: Eneabba main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	2.69	4.41	3.88	5.76	1.90		
Thumper®					110		
RockStar <sup>®</sup>	108	112	106	115	104		
Tomahawk CL Plus®*				106	120		
Brumby <sup>th</sup>			104	110	110		
Devil®	110	109	102	109	111		
Firefly®			101		104		
Kinsei®	102	110	102	114	97		
LRPB Matador <sup>®</sup>				107	110		
Ninja®	104	107	102	111	104		
Calibre <sup>®</sup>		108	100	105	114		
Scepter	109	106	104	105	112		
Ballista <sup>(b)</sup>	107		95	110	111		
Denison®	100	109	108	110	89		
Catapult <sup>®</sup>	103	107	102	106	97		
Vixen®	112	101	103	97	121		
Sowing date	7 Jun	7 May	15 May	6 May	31 May		
Rainfall J–M (mm)	12	70	79	70	18		
Rainfall A–O (mm)	273	275	477	429	212		

Special thanks to 2023 trial cooperator, Jim Heal.

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

Table 4: Mingenew main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.56	4.31	4.09	5.02	1.56	
Tomahawk CL Plus <sup>⊕</sup> *				108	116	
Thumper®					109	
RockStar <sup>(b)</sup>	111	108	111	108	107	
Brumby <sup>(b</sup>			110	108	109	
Devil®	112	107	108	108	109	
Calibre <sup>®</sup>		106	106	108	108	
LRPB Matador <sup>®</sup>					109	
Scepter	111	105	109	105	110	
Vixen®	113	102	110	104	114	
Firefly <sup>⊕</sup>			105		105	
Ballista <sup>(b)</sup>	108		100	108	107	
Ninja®	106	107	105	105	106	
Sting®	111	103	105	104	111	
Kinsei <sup>®</sup>	105	107	104	106	101	
Denison®		102	109	104	96	
Sowing date	7 Jun	7 May	13 May	19 May	31 May	
Rainfall J–M (mm)	12	104	68	69	7	
Rainfall A–O (mm)	370	203	434	314	221	

Special thanks to 2023 trial cooperator.

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

CANOLA



Table 5: Morawa main season wheat.					
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.57	1.35	2.25	4.27	
Tomahawk CL Plus®*				111	
Vixen®	133	117	118	103	
Sting®	128	114	112	104	
Calibre®		110	104	108	
Brumby®			101	112	
Scepter	110	109	106	108	
Devil®	108	108	101	111	
Ballista®	111		99	111	Trial failed
LRPB Havoc <sup>(b)</sup>	116	112	118	97	lanea
LRPB Avenger®	136	109		93	
RockStar <sup>(b)</sup>	88	101	95	114	
Razor CL Plus <sup>(b*</sup>	122	111	113	96	
Ninja®	92	104	98	110	
LRPB Anvil <sup>®</sup> CL Plus*			121	86	
Hammer CL Plus <sup>(b*</sup>		104	105	97	
Sowing date	7 Jun	25 May	15 May	13 May	31 May
Rainfall J–M (mm)	5	111	78	83	24
Rainfall A–O (mm)	186	145	297	329	99

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 7: Nabawa main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	2.10	4.80	6.30	5.67	3.14	
RockStar <sup>(b)</sup>	113	111	107	115	105	
Thumper®					107	
Tomahawk CL Plus®*				104	112	
Brumby <sup>(b</sup>			105	108	107	
Kinsei <sup>⊕</sup>	108	110	102	114	101	
Ninja®	108	108	107	107	104	
Firefly <sup>(b)</sup>			103		103	
Devil®	110	108	104	107	107	
Denison®		108	99	118	97	
LRPB Matador®					106	
Scepter	109	104	106	103	107	
Valiant <sup>®</sup> CL Plus*			96	117	93	
Ballista <sup>(b)</sup>	105		101	102	105	
Zen®	105	99	109	102	102	
Calibre <sup>(b)</sup>		105	99	103	107	
Sowing date	7 Jun	25 May	15 May	10 May	31 May	
Rainfall J–M (mm)	3	35	40	39	18	
Rainfall A–O (mm)	305	279	404	445	226	

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Special thanks to 2023 trial cooperator, Jason Stokes. \* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

#### Table 6: Mullewa main season wheat

	Table 0. Malewa main Season wheat.							
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.53	1.85	4.68	5.13	2.31			
Vixen®	139	129	114	115	109			
Tomahawk CL Plus®*				115	109			
LRPB Havoc <sup>®</sup>	113	127	114	111	104			
Sting	137	122	110	111	107			
Razor CL Plus <sup>(b*</sup>	129	122	109	107	104			
LRPB Avenger®	138	120		105	106			
Ballista <sup>(b)</sup>	126		106	110	105			
Scepter	111	111	108	109	105			
Calibre®		109	105	108	107			
Thumper®					105			
Devil®	111	106	106	109	106			
LRPB Anvil® CL Plus*		119	105	102	105			
LRPB Matador®					105			
Brumby <sup>®</sup>			106	108	105			
Dozer <sup>(b</sup> CL Plus*			103		102			
Sowing date	7 Jun	25 May	11 May	18 May	11 May			
Rainfall J–M (mm)	3	81	126	63	94			
Rainfall A–O (mm)	152	209	278	268	107			
C								

Special thanks to 2023 trial cooperator, Spring Park Farms. \* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 8: Ogilvie main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.48	4.18	5.38		1.37	
Tomahawk CL Plus®*					108	
Vixen <sup>®</sup>	118	113	107		102	
LRPB Havoc <sup>®</sup>	108	110	106		106	
Sting®	115	110	105		99	
Scepter	110	107	106		104	
Thumper®				iei	99	
Devil®	110	106	105	Compromised trial	103	
LRPB Matador <sup>(b)</sup>				omis	104	
Brumby <sup>®</sup>			105	mpro	105	
Ballista <sup>(b)</sup>	107		105	ଥ	96	
Calibre <sup>(b)</sup>		106	103		98	
Razor CL Plus®*	107	108	103		98	
Ninja <sup>®</sup>	101	105	105		104	
RockStar <sup>(b)</sup>	104	102	105		109	
LRPB Avenger®	116	105		1	100	
Sowing date	7 Jun	25 May	12 May	4 May	1 Jun	
Rainfall J–M (mm)	7	30	61	22	14	
Rainfall A–O (mm)	195	227	510	403	128	

Special thanks to 2023 trial cooperator. \* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

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Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.94	3.24	5.57	4.23				
Tomahawk CL Plus®*				110				
RockStar <sup>(b</sup>	115	104	107	117				
Brumby			108	111				
Vixen <sup>®</sup>	111	110	113	99				
Scepter®	111	106	109	107				
LRPB Havoc	100	112	113	99	ia			
Devil®	115	104	107	109	Compromised tria			
Zen®	100	108	108	107	omis			
Ninja <sup>(b</sup>	107	103	105	110	mpr			
Boree			105		රි			
Denison <sup>®</sup>		100	99	117				
Firefly®			103					
Chief CL Plus <sup>(b*</sup>	98	108	106	104				
Sting®	110	106	108	98				
Corack <sup>(b</sup>	99	110						
Sowing date	7 Jun	25 May	11 May	5 May	1 Jun			
Rainfall J–M (mm)	7	37	71	32	22			
Rainfall A–O (mm) 195 174 340 270								

Special thanks to 2023 trial cooperator, Helenore Farms. \* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 11: Ogilvie	early se	ason wh	ieat.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.91			5.30	1.09
Denison®				107	130
Longsword®	99		Trial	124	60
Valiant <sup>®</sup> CL Plus*				104	130
Catapult <sup>®</sup>	117			95	135
Stockade <sup>(b)</sup>				109	105
Kinsei®	107	la		98	134
RockStar <sup>(b)</sup>	111	ed tr		92	150
IGW6755		Compromised tria	results below		137
Cutlass®	105	mpro	standard	100	116
lllabo <sup>(b)</sup>	89	8		114	66
Brumby <sup>®</sup>					128
Magenta®	104			87	108
Yitpi	93			90	104
Sheriff CL Plus	105			79	115
EG Jet <sup>∉</sup>	88			81	94
Sowing date	17 Apr	4 May	21 Apr	14 Apr	21 Apr
Rainfall J–M (mm)	7	30	61	22	14
Rainfall A–O (mm)	195	227	510	403	128
Irrigation A–O (mm)		10			10

Special thanks to 2023 trial cooperator.

\* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

#### Table 10: Eneabba early season wheat

Tuble To: Effects	Sacary	Season	mean.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		4.33	4.62	5.52	1.94
Denison®		113	108	105	132
Valiant <sup>(b</sup> CL Plus*			104	106	128
Kinsei <sup>th</sup>		111	107	97	138
RockStar <sup>®</sup>		113	106	92	146
Catapult <sup>®</sup>		111	110	90	142
IGW6755					123
Brumby <sup>®</sup>					143
Cutlass <sup>®</sup>	No trial	105	103	100	115
Stockade®				115	87
Longsword®		96	99	122	63
Yitpi		98	101	91	111
Illabo <sup>®</sup>		93	91	118	57
Magenta <sup>(b)</sup>		99	101	86	109
Sheriff CL Plus <sup>(b*</sup>		99	106	74	127
EG Jet <sup>(b)</sup>		92	102	79	111
Sowing date		22 Apr	21 Apr	12 Apr	19 Apr
Rainfall J–M (mm)		70	79	70	18
Rainfall A–O (mm)		275	477	429	212
Irrigation A–O (mm)					10

Special thanks to 2023 trial cooperator, Jim Heal. \* herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

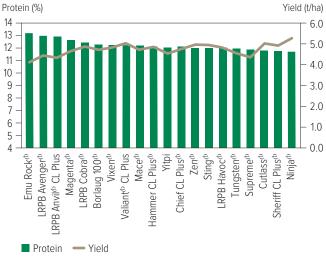
#### Wheat variety quality – Geraldton

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.

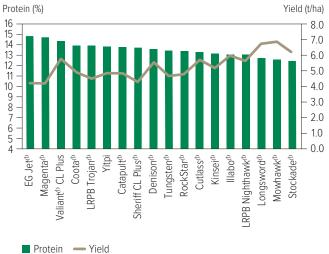
The following figures show the grain quality trends as histograms from 2022 and 2023 NVT averaged for trials in the Geraldton region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

#### Protein and yield comparisons

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

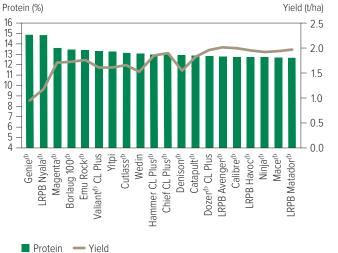


## Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Geraldton in 2022.

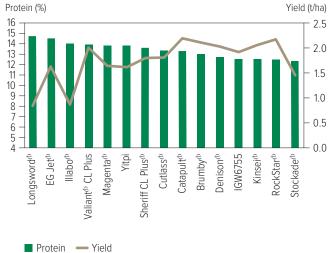


**∛**GRDC

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



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



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#### Test weight comparisons

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

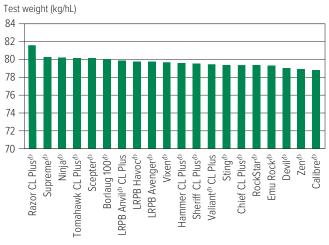
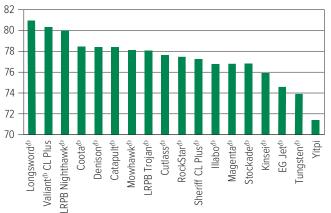


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Geraldton in 2022.

Test weight (kg/hL)

**∛**GRDC

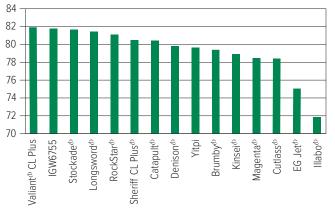


#### Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from seven NVT sites in Geraldton in 2023.

Test weight (kg/hL) 85 84 83 82 81 80 Brumby<sup>(b)</sup> Zen<sup>(b)</sup> Catapult<sup>(h)</sup> Tomahawk CL Plus<sup>(b)</sup> Magenta<sup>(b</sup> Chief CL Plus<sup>(b)</sup> Denison<sup>(b)</sup> LRPB Havoc<sup>(b)</sup> LRPB Matador<sup>(b)</sup> Hammer CL Plus<sup>(b)</sup> Kinsei<sup>®</sup> Yitpi Ninja<sup>®</sup> Cutlass<sup>(b)</sup> RockStar<sup>(b)</sup> \_RPB Anvil<sup>®</sup> CL Plus Borlaug  $100^{(b)}$ Scepter<sup>(b)</sup> Mace Devil

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

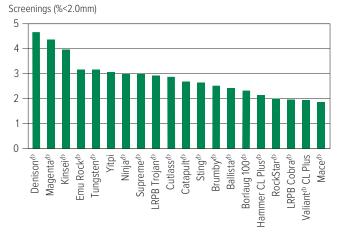
Test weight (kg/hL)



LUPIN

#### Screenings comparisons

Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from eight NVT sites in Geraldton in 2022.



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

Screenings (%<2.0mm)

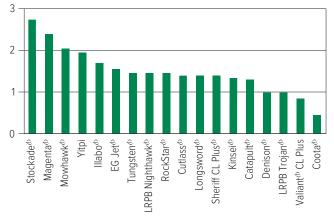
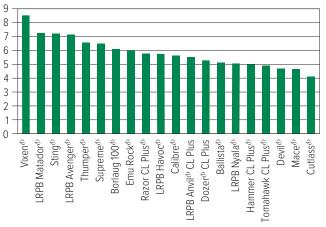


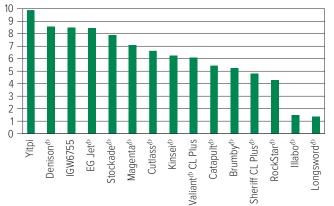
Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from seven NVT sites in Geraldton in 2023.

Screenings (%<2.0mm)



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

Screenings (%<2.0mm)



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#### Wheat variety disease ratings – Western Australia

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

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

Table 12: Wheat o	disease gi	uide for V	Vestern /	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>(b)</sup>	MS	MS	MRMS	MR	RMR	S	S	SVS	S		MRMS	S
Boree	MRMS	MS	MRMS	MR	MR	S	S	S	S		MSS	S
Borlaug 100 <sup>(</sup> )	MRMS	MRMS	MRMS	MR	RMR	MR	S	MS	S		MS	MSS
Brumby	MRMS	MRMS	MS	MR	RMR	SVS	R	MSS (P)	MRMS	MS (P)	MRMS	S
Calibre®	MRMS	MSS	MSS	MR	RMR	S	MSS	S	S	MRMS (P)	MRMS	S
Catapult <sup>®</sup>	MRMS	MRMS	MS	MR	RMR	S	S	MSS	S	MRMS	R	MSS
Chief CL Plus <sup>®</sup>	MRMS	MS	MRMS	MR	S	MR	S	MSS	MRMS	MRMS	MS	MSS
Coota	MSS	MRMS	MS	RMR	RMR	MR	S	MSS	MR		MR	MSS
Cutlass <sup>(b)</sup>	MSS	MRMS	MRMS	R	R	RMR	S	MSS	MSS	MS	MR	S
Denison®	MRMS	MR	MRMS	MS	MRMS	S	S	MS	S	MRMS (P)	MS	MSS
Devil®	MRMS	MRMS	MS	S	MR	SVS	SVS	SVS	MSS	MRMS	MSS	MSS
Dozer <sup>()</sup> CL Plus	MS	MRMS (P)	MSS (P)	MS	MRMS	MSS	MSS (P)	MSS (P)	MRMS		MS (P)	S
DS Bennett <sup>®</sup>	MRMS	MRMS	MR	MS	RMR	SVS	RMR	MR	S		S	VS
DS Pascal <sup>(b)</sup>	MS	MRMS	MRMS	MSS	RMR	MRMS#	RMR	MS	S		S	S
EG Jet <sup>(b)</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®	MSS	MRMS	MRMS	MRMS	MRMS	MSS	MRMS	MRMS	S		S	S
Emu Rock <sup>()</sup>	MS	S	MS	MS	MRMS	SVS	MSS	S	MSS	MS (P)	S	MSS
Firefly <sup>(b)</sup>	MRMS	MRMS (P)	MSS (P)	S	MS	MSS	MSS (P)	MSS (P)	MS	- \ /	S (P)	S
Genie®	MRMS (P)			MS (P)	MR (P)	S (P)					- (. /	-
Hammer CL Plus®	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>(b</sup>	MS	MR	MR	MRMS	RMR	S	R	MR	MSS	RMR	MRMS	S
Jillaroo	MS	MS	MS	MS	MR	S	S	MRMS (P)	S		MS	S
Kinsei <sup>(h)</sup>	MS	MRMS	MRMS	MSS	MRMS	MSS	S	MS	S	S	MSS	MSS
Longsword	MRMS	MRMS	MRMS	MR	RMR	MS	MS	MRMS	MRMS		MRMS	MSS
LRPB Anvil <sup>®</sup> CL Plus	MSS	MSS	MSS	MR	RMR	SVS	MSS	SVS	MSS	S (P)	MS	MSS
LRPB Avenger <sup>(b)</sup>	MS	MSS	MS	MS	MRMS	S	S	S	MSS	MS (P)	MRMS	S
LRPB Havoc <sup>(b)</sup>	MRMS	MS	MS	S	MR	S	MS	MRMS	S	MRMS	S	MSS
LRPB Kittyhawk <sup>®</sup>	MRMS	MR (P)		MRMS (S)	RMR	MR	MRMS	MR	S		S	SVS
LRPB Matador <sup>(b)</sup>	MRMS	MRMS (P)	MSS (P)	MS MS	RMR	MSS	MS (P)	MSS (P)	S		MS (P)	S
LRPB Nighthawk <sup>(b)</sup>	MS	MRMS	MRMS	RMR	RMR	MSS	MSS	MR	MSS	MRMS (P)	MS	MSS
LRPB Nyala <sup>(b)</sup>	MS	MSS	MR	SVS	RMR	S	R	SVS	S		MSS	MSS
LRPB Oryx <sup>®</sup>	MSS	S	MSS	MR	RMR	RMR#	RMR	SVS	MSS	MSS (P)	S	MSS
LRPB Trojan <sup>®</sup>	MSS	MS	MS	MRMS	MR	MR#	S	S	MSS	MSS (P)	MS	MS
Mace <sup>(b)</sup>	MRMS	MS	MS	MRMS	RMR	S	MSS	S	MS	MRMS	MRMS	S
Magenta	MRMS	MRMS	MS	MR	MS	RMR	MRMS	MS	MSS	MSS	S	MSS
Ninja <sup>(b)</sup>	MRMS	MRMS	MS	S	MS	S	S	MSS	S	S	MS	S
Razor CL Plus <sup>®</sup>	MSS	MS	MS	MRMS	RMR	S	MSS	SVS	S	5	MR	S
Nazor CL Plus	14122	IVIS	IVIS	IVIRIVIS	RIVIR	3	11/122	272	3		INIK	5

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Continued on next page

Table 12: Wheat d	isease gı	uide for V	Vestern <i>i</i>	Australia	(continu	ed).						
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>®</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>⊕</sup>	MRMS	MRMS	MRMS	MRMS	RMR	S	MSS	S	MRMS	MS	MSS	S
Scepter®	MRMS	MRMS	MSS	MRMS	RMR	MSS	S	S	S	MS	MRMS	MSS
Severn <sup>®</sup>	MRMS	MR	MR (P)	MS	R	MRMS	R	MS (P)	S		MSS (P)	S
Sheriff CL Plus®	MRMS	MRMS	MRMS	MS	MRMS	SVS	SVS	S	MRMS	MRMS	MS	S
Sting <sup>®</sup>	MRMS	MS	MS	MRMS	MRMS	SVS	MSS	S	MS	MSS (P)	MS	MSS
Stockade <sup>(b)</sup>	MRMS	MRMS	MR	MS	RMR	MR	SVS	MS	S		MRMS	S
Supreme®	MS	S		MRMS	RMR	MR	MS	MSS	MSS		S	MSS
Thumper®	MS (P)			MS (P)	MR (P)	S (P)						
Tomahawk CL Plus®	MRMS	MRMS (P)	S (P)	MR	RMR	S	S (P)	MSS (P)	S		MRMS (P)	S
Valiant <sup>®</sup> CL Plus	MRMS	MR	MRMS	MR	R	S	SVS	MRMS	S	MSS (P)	MSS (P)	MSS
Vixen®	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>®</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®	MRMS	MS	MRMS	S	MR	S	S	S	MRMS	MRMS	S	S

Learn more via the <u>NVT Disease Ratings</u>. 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.





#### **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 <u>nvt.grdc.com.au</u> 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>th</sup> CL	InterGrain	Under malt evaluation	4.25	Neo <sup>6</sup> CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to medium- high rainfall environments. Neo <sup>6</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>6</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>6</sup> CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025.
Spinnaker®	Secobra Recherches		TBC	Released under code name SCA21-Y003.

\* EPR amount is ex-GST,  $^{(b)}$  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** 



#### **Barley variety yield performance – Geraldton**

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: Eradu m	ain seas	on barle	ey.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.11		2.41	4.55	2.14
Combat <sup>₯</sup>			122	110	118
Rosalind <sup>®</sup>	136		113	106	112
Beast	111		117	105	107
Neo <sup>(b)</sup> CL*					107
Compass®	94		115	103	106
Leabrook	90	ie	111	105	105
Fathom®	127	Compromised trial	115	99	109
Cyclops <sup>(b)</sup>		omis	107	107	102
Titan AX <sup>(b*</sup>		mpre		105	104
Minotaur		ଥ	106	105	105
Buff <sup>(b)</sup>	119		106	102	108
Spinnaker®				105	106
La Trobe®	106		105	100	103
Maximus <sup>(b</sup> CL*	117		105	101	100
Commodus <sup>®</sup> CL*			107	99	102
Sowing date	7 Jun	25 May	26 May	21 May	10 May
Rainfall J–M (mm)	3	63	79	46	69
Rainfall A–O (mm)	270	201	343	329	151

Special thanks to 2023 trial cooperator.

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

Table 3: Yuna ma	ain seas	on barle	у.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.85	5.10	5.39	
Combat <sup>⊕</sup>			112	109	
Beast <sup>(b)</sup>		108	108	107	
Cyclops <sup>™</sup>		100	110	108	
Maximus <sup>(b</sup> CL*		103	112	101	
Rosalind <sup>®</sup>		109	110	98	
Minotaur®		102	108	103	
Fathom®		107	102	105	
Leabrook <sup>(b)</sup>	No trial	104	101	108	Trial failed
Laperouse®		99	106	106	laneu
Compass®		108	98	106	
Titan AX <sup>(b*</sup>				108	
Spartacus CL <sup>(b*</sup>		102	105	97	
Commodus <sup>(b)</sup> CL*		104	98	102	
La Trobe®		105	101	98	
Buff <sup>®</sup>		105	99	97	
Sowing date		25 May	11 May	5 May	1 Jun
Rainfall J–M (mm)		37	71	32	22
Rainfall A–O (mm)		174	340	270	95

Special thanks to 2023 trial cooperator, Helenore Farms.

GRDC

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

Table 2: Mingenew main season barley.											
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	1.16	5.04	4.65	5.74	1.60						
Combat <sup>®</sup>			117	110	124						
Rosalind <sup>⊕</sup>	123	105	118	107	121						
Neo <sup>(b</sup> CL*					107						
Beast <sup>(b)</sup>	125	102	106	105	125						
Minotaur <sup>®</sup>		104	112	105	109						
Cyclops <sup>(b)</sup>		105	107	107	114						
Maximus <sup>®</sup> CL*	108	99	116	103	117						
Fathom <sup>(b)</sup>	131	100	105	100	114						
Spinnaker®				104	99						
Buff <sup>(b)</sup>	113	103	103	102	104						
Leabrook <sup>®</sup>	113	103	94	105	113						
Laperouse <sup>(b)</sup>	100	101	102	103	108						
La Trobe®	109	99	103	100	110						
Compass <sup>(b)</sup>	120	100	92	102	117						
Spartacus CL <sup>(b*</sup>	99	96	108	99	108						
Sowing date	7 Jun	7 May	13 May	12 May	31 May						
Rainfall J–M (mm)	12	104	68	69	7						
Rainfall A–O (mm)	370	203	434	314	221						

Special thanks to 2023 trial cooperator.

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

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#### **Barley variety quality – Geraldton**

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 Geraldton 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 three NVT sites in Geraldton in 2022.

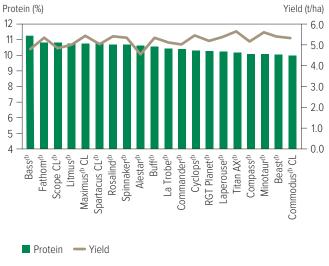
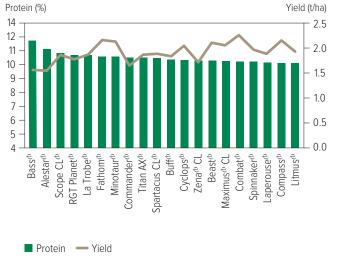


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from two NVT sites in Geraldton in 2023.



#### Test weight comparisons

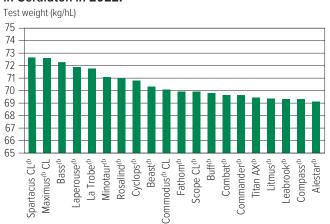
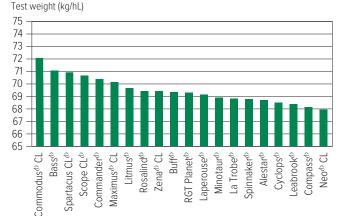


Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from three NVT sites in Geraldton in 2022.

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





#### **Screenings comparisons**

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

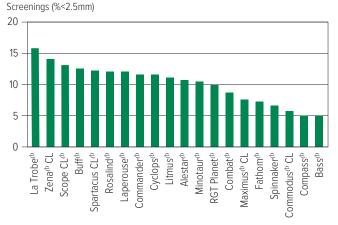
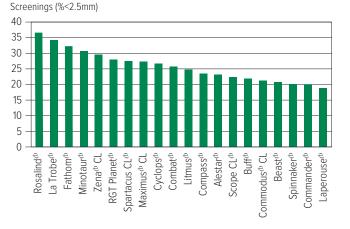
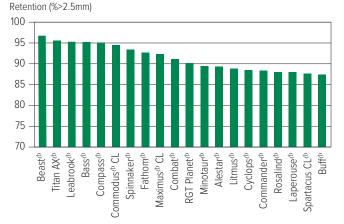


Figure 6: Screenings (<2.5mm) comparisons for main season barley varieties from two NVT sites in Geraldton in 2023.



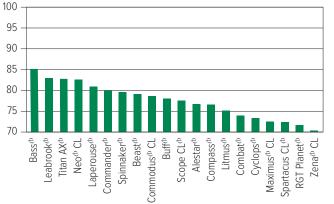
#### **Retention comparisons**

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



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

Retention (%>2.5mm)



#### 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 4: Barley disea	ase guide f	or Weste	rn Austra	lia.							
Variety	Scald	Net form net blotch*	Spot form net blotch	Powdery mildew	Leaf rust	Crown rot resistance	Barley yellow dwarf virus	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus quasitereoides)	CCN	Ramularia
Alestar®	S		S	RMR	MS	S	MRMS	MR		R^ (P)	SVS
Banks®	SVS		MSS	MR-MS	S	MSS	MRMS	MS	MSS	S	VS
Bass <sup>(b)</sup>	MRMS-MS		MSS	MSS	SVS	MSS	MRMS	MS	MSS	S	VS
Beast <sup>(b)</sup>	S		MSS	RMR	S	S	MSS	MRMS	MSS	MR	SVS
Bottler <sup>(b)</sup>	S		MSS	RMR	MS	SVS	MS	MS			SVS
Buff®	MS		S	MSS	S	S	MRMS	MRMS	S		SVS
Combat <sup>(b)</sup>	S		MRMS	R	MRMS	S	MRMS-MS	MRMS	S (P)	MR	SVS
Commander	MS		MSS	RMR	MSS	S	MRMS-MS	MRMS		R	SVS
Commodus <sup>(b)</sup> CL	MSS		MSS	RMR	S	S	MRMS-MS	MRMS	MS	R	SVS
Compass <sup>(b)</sup>	MS		MSS	R	S	MSS	MSS	MRMS	S	R	SVS
Cyclops <sup>(b)</sup>	MRMS		MSS	R	S	MSS	S	MRMS	MSS (P)	S	SVS
Fairview <sup>(b</sup>	S		MSS	R	S	MSS	MRMS	MR			SVS
Fandaga®	SVS		MSS	RMR	MS	MSS	MS	MR	MS (P)	R	VS
Fathom <sup>(b</sup>	MR		MR	MR	MS	SVS	MS	MRMS	MSS	R	SVS
Flinders®	MSS		S	RMR	MS	MSS	MRMS-MS	MRMS	MSS (P)	S	SVS
Keel	MS		MR	R-MRMS	SVS	S	MRMS-MS	MS		R	SVS
Kiwi	S		S	RMR	MS	MSS	MRMS-MS	MRMS		S	VS
La Trobe®	MR		MSS	MS	MSS	S	S	MRMS	S	R	SVS
Laperouse®	S		MS	RMR	MSS	S	MRMS	MRMS	MS	S	VS
Leabrook <sup>(b</sup>	MSS		MSS	RMR	S	S	MSS	MRMS	MS	RMR	VS
Litmus <sup>(b</sup>	S		S	R	S	S	S	MS	MSS (P)	MS	VS
Maximus <sup>®</sup> CL	MR		MSS	RMR/S	MSS	S	MRMS	MRMS	S	R	VS
Minotaur®	VS		S	S	S	MSS	S	MRMS	MS (P)	R	SVS
Neo <sup>(b)</sup> CL	MR (P)		MRMS (P)	R (P)	MSS (P)		MRMS (P)	RMR (P)	S (P)	R	SVS (P)
RGT Planet®	MR		S	R	MRMS	MSS	MRMS	MRMS	MS	R (P)	SVS
Rosalind	MSS		S	MSS	MR	S	MRMS-MS	MRMS	MSS	R	VS
SakuraStar	MS		MS	RMR	S	S	MRMS	MR	-	R	SVS
Scope CL <sup>®</sup>	MS		MSS	RMR	MSS	S	MRMS	MRMS	MRMS	S	SVS
Spartacus CL <sup>(b)</sup>	RMR		S	MS	MSS	S	S	MRMS	MSS	R	VS
Spinnaker <sup>(b)</sup>	MR		S	R	MS	S	MRMS	MR	MS (P)	S	VS
Titan AX <sup>(b)</sup>	S		MSS	RMR	S	S	MS	MR	S (P)	MR (P)	VS
Topstart	MSS		MSS	R	MS	MSS	MRMS	RMR		S	SVS
Urambie	RMR		MSS	MRMS-MSS	MSS	MSS	MRMS	MRMS			VS
Westminster <sup>(b</sup>	MR		MSS	RMR	MRMS	MSS	MRMS-MS	MRMS			SVS
Yeti <sup>(b)</sup>	SVS		MS	MR	S	S	MS	MR		RMR	VS
Zena <sup>()</sup> CL	MR		S	R	MS	S	MRMS-MS	MRMS	MS (P)	R	VS

\* ratings will be updated when available. Learn more via the <u>NVT Disease Ratings</u>.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant, MI = moderately intolerant, VI = very intolerant, (P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences,

^ line contains a few susceptible off types.



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## CANOLA

#### New canola varieties

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

Variety	Breeding company	End point royalty* (\$)	Comments supplied by breeding company <sup>1</sup>
DG Avon TT <sup>()</sup>	Nutrien Ag Solutions Ltd	TBC	Early, determinant, short TT open pollinated variety suited to low-medium rainfall zones.
Hyola® Continuum CL	Advanta Seeds	N/A	An early-mid maturity Clearfield® hybrid, Continuum CL provides wide environmental adaptability with excellent grain oil potential. It exhibits strong yields in target environments and demonstrates excellent adaptability to growing regions with a range of 1.0–5.5 t/ha. Continuum CL showcases an exceptionally high level of early plant vigour, high lodging resistance, and an outstanding blackleg rating of 'R' due to its distinctive tri-group resistance, ADF.
Hyola® Defender CT	Advanta Seeds	N/A	A mid-season maturity CT hybrid, Defender CT delivers remarkable grain yield, robust plant vigour and a very high grain oil content. Defender CT performance is closely aligned with the renowned Hyola® Blazer TT variety. Defender CT offers uniform flowering, manageable height for direct harvesting and an exceptional blackleg rating of 'R' due to its distinctive tri-group resistance, ADF.
PY421C	Pioneer Hi-Bred Aust		Variety description not supplied.

\* EPR amount is ex-GST, <sup>(b)</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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#### Canola variety yield performance – Geraldton

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: Coorow	low-me	d rainfal	GLY.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			3.45	3.06	
Nuseed <sup>®</sup> Hunter TF			110	107	
InVigor <sup>®</sup> LR 4540P				104	
InVigor <sup>®</sup> R 4520P			107	102	
Pioneer® 44Y27 (RR)		Trial failed	106	103	Compromised tria
Nuseed <sup>®</sup> Raptor TF	No trial		104	103	lisec
Pioneer <sup>®</sup> 44Y30 RR	NO LIIdi		104	102	pron
InVigor <sup>®</sup> R 4022P			102	99	Com
Nuseed® Emu TF			98	101	
Hyola® Garrison XC				99	
Hyola® Battalion XC			95	97	
Sowing date		25 May	8 May	26 Apr	6 May
Rainfall J–M (mm)		119	83	62	23
Rainfall A–O (mm)		159	323	244	138

Table 2: Greenough low-med rainfall GLY.	Table 2: Gree	nough low-	med rainfall GLY.
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Special thanks to 2023 trial cooperator, Living Farm Pty Ltd.

Learn more via the NVT Long Term Yield Reporter

Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.78		2.53	2.34			
InVigor <sup>®</sup> LR 4540P				112			
Nuseed <sup>®</sup> Hunter TF			107	109			
InVigor <sup>®</sup> R 4520P	99		109	112			
Pioneer® 44Y27 (RR)	101	Compromised trial	104	102	Compromised tria		
Pioneer <sup>®</sup> 44Y30 RR		lisec	104	105	lisec		
InVigor <sup>®</sup> R 4022P	99	prom	103	103	prom		
Nuseed <sup>®</sup> Emu TF		Com		93	Com		
Nuseed® Raptor TF	94		103	102			
Hyola® Garrison XC	105			99			
Hyola® 410XX	108		87	91			
Sowing date	7 Jun	12 Jun	21 Apr	12 May	6 May		
Rainfall J–M (mm)	11	32	53	32	7		
Rainfall A–O (mm)	379	233	416	480	227		

Special thanks to 2023 trial cooperator, Catalina Farms. Learn more via the NVT Long Term Yield Reporter

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.01	2.58	2.46	2.24	
Nuseed® Emu TF	112	113		107	
Nuseed® Hunter TF			108	109	
Pioneer® 44Y27 (RR)	103	106	107	107	
InVigor <sup>®</sup> LR 4540P				107	tria
Nuseed® Raptor TF	103	102	104	101	Compromised tria
Hyola® Battalion XC		102	101	98	pron
Pioneer® 44Y30 RR			101	101	Com
InVigor <sup>®</sup> R 4022P	94	98	101	102	
DG Lofty TF			100	95	
InVigor <sup>®</sup> R 4520P	90	94	100	103	
Sowing date	7 Jun	5 May	5 May	12 May	6 May
Rainfall J–M (mm)	12	104	58	69	6
Rainfall A–O (mm)	370	203	333	314	219

Table 4: Yuna low-med rainfall GLY. Mean yield (t/ha) Nuseed® Hunter TF 108 InVigor® LR 4540P 104 Pioneer® 44Y27 (RR) 100 109 105 Nuseed® Emu TF 112 96 Pioneer® 44Y30 RR 101 104 Trial Trial failed failed InVigor® R 4520P 104 102 99 InVigor® R 4022P 96 102 98 Hyola® Battalion XC 98 100 DG Lofty TF 97 100 98 Hyola® Garrison XC 111 Sowing date 7 Jun 6 May 5 May 28 Apr 6 May Rainfall J-M (mm) 7 37 71 32 22 Rainfall A–O (mm) 195 174 340 270 95

Special thanks to 2023 trial cooperator, Helenore Farms. Learn more via the NVT Long Term Yield Reporter

CHICKPEA FIELD PEA

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Table 5: Mingenew low-med rainfall IMI.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.68	2.60	2.28	2.12				
Saintly CL	111							
Hyola® Equinox CL				98				
Pioneer® 44Y94 CL			103	105				
Hyola <sup>®</sup> Solstice CL			95		Trial			
VICTORY® V7002CL	96	101			results below			
Pioneer® 44Y90 (CL)	94	98			standard			
Pioneer® 43Y92 (CL)	103	99	98	98				
Hyola® Continuum CL				96				
Hyola® 575CL	99							
Sowing date	7 Jun	5 May	5 May	12 May	6 May			
Rainfall J–M (mm)	12	104	58	69	6			
Rainfall A–O (mm)	370	203	333	314	219			

Special thanks to 2023 trial cooperator.

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

Learn more via the NVT Long Term Yield Reporter

Table 7: Greenough low-med rainfall TT.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.69		1.89	2.08			
Hyola® Blazer TT			113	117			
InVigor® T 4510	108		109	108			
InVigor <sup>®</sup> LT 4530P		]	113	110			
Hyola® Defender CT		Compromised trial		113	trial		
InVigor® T 4511		lised	104	104	Compromised tria		
Hyola® Enforcer CT		Drom	102	106	Drom		
RGT Capacity TT		Com	100	103	Com		
Renegade TT <sup>®</sup>			105	106			
SF Spark TT	104	1	99	98			
Bandit TT®		]	98	95			
Sowing date	7 Jun	12 Jun	21 Apr	12 May	6 May		
Rainfall J–M (mm)	11	32	53	32	7		
Rainfall A–O (mm)	379	233	416	480	227		

Special thanks to 2023 trial cooperator. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 8: Mingenew low-med rainfall TT.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	0.53	2.40	2.01	1.95		
InVigor® T 4510	111	108	111	111		
InVigor® T 4511			106	105		
SF Spark TT	109	105	103	103		
RGT Capacity TT		105	101	103	Trial	
InVigor <sup>®</sup> LT 4530P		100	107	107	results	
DG Avon TT				100	below	
Hyola® Blazer TT	102	99	102	106	standard	
Bandit TT®			102	101		
Hyola® Enforcer CT	113	101	99	99	]	
Hyola® Defender CT				100	]	
Sowing date	7 Jun	5 May	5 May	12 May	6 May	
Rainfall J–M (mm)	12	104	58	69	6	
Rainfall A–O (mm)	370	203	333	314	219	

Special thanks to 2023 trial cooperator. Learn more via the NVT Long Term Yield Reporter

Table 6: Coorow low-med rainfall TT.

No trial

Special thanks to 2023 trial cooperator, Catalina Farms.

Learn more via the NVT Long Term Yield Reporter

117

114

112

111

110

106

8 May

83

323

Trial

failed

25 May

119

159

113 109

109

109

107

107

104

105

102

103

26 Apr

62

244

Compromised trial

6 May

23

138

Mean yield (t/ha) HyTTec® Trident

SF Dynatron TT

HyTTec® Velocity

HyTTec® Trophy

Hyola® Blazer TT

InVigor® T 4510

InVigor® T 4511

InVigor® LT 4530P

Hyola® Defender CT

RGT Baseline® TT

Rainfall J-M (mm)

Rainfall A-O (mm)

Sowing date

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Table 9: Yuna low-med rainfall TT.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.95		3.05	2.37			
HyTTec® Trident	125		121	117			
HyTTec <sup>®</sup> Velocity				107			
HyTTec <sup>®</sup> Trophy	122			112			
InVigor® T 4510	110		115	110			
InVigor® T 4511		Trial	107	108	Trial		
Hyola® Blazer TT		failed		107	failed		
InVigor <sup>®</sup> LT 4530P			108	107			
Hyola <sup>®</sup> Enforcer CT				107			
SF Spark TT	101		105	102			
Hyola® Defender CT				102			
Sowing date	7 Jun	6 May	5 May	28 Apr	6 May		
Rainfall J–M (mm)	7	37	71	32	22		
Rainfall A–O (mm)	195	174	340	270	95		

Special thanks to 2023 trial cooperator, Helenore Farms. Learn more via the <u>NVT Long Term Yield Reporter</u>



#### 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.

		2024 autumn blackleg ra	ting	
		Fluopyram	Pydiflumetofen	
/ariety	Bare	(e.g. ILeVO®)	(e.g. Saltro®)	Туре
ONVENTIONAL VARIETIES				
RIAZINE-TOLERANT VARIETIES				
	The autumr	n 2024 blackleg d	isease ratings will	be
		is report when the		
		ecent published ra		<u>)</u>
	using the BI	lackleg Managem	ent Guide or the	
		se Ratings tool.		
	-			
	lies			
/IDAZOLINONE-TOLERANT VARIET	IES			
/IDAZOLINONE-TOLERANT VARIET	TIES			
/IDAZOLINONE-TOLERANT VARIET	TES			
MIDAZOLINONE-TOLERANT VARIET	IES			
MIDAZOLINONE-TOLERANT VARIET				
AIDAZOLINONE-TOLERANT VARIET				
AIDAZOLINONE-TOLERANT VARIET	IES   I			

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

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	2	024 autumn blackleg ra	ting	
/ariety Ba	Bare	Fluopyram (e.g. ILeVO®)	Pydiflumetofen (e.g. Saltro®)	Туре
	Buic	(e.g. 12000 /	(e.g. builto )	iype
IIDAZOLINONE AND TRIAZIN	E-TOLEDANT VADIETIES			
IDAZOLINONE AND TRIAZIN				
LYPHOSATE-TOLERANT VARI	FTIES			
LIPHUSAIE-IULERANI VARI				
	The autumn	2024 blacklog di	soaso ratings will	ho
			sease ratings will	
	added to this	s report when the	y become availab	le.
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	added to this The most red using the Bla	s report when the cent published rai	y become availab tings are available	le.
LYPHOSATE AND IMIDAZOLIN	added to this The most red using the Bla NVT Disease	s report when the cent published rai	y become availab tings are available	le.
SLYPHOSATE AND IMIDAZOLIN	added to this The most red using the Bla NVT Disease	s report when the cent published rai	y become availab tings are available	le.
SLYPHOSATE AND IMIDAZOLIN	added to this The most red using the Bla NVT Disease	s report when the cent published rai	y become availab tings are available	le.

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

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WHEAT

BARLEY

## **CHICKPEA**

#### Chickpea variety yield performance – Western Australia

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

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

Table 1: Mingenew desi chickpea.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.90	1.55	1.77	1.58			
CBA Captain®	111	115	107	108			
PBA Striker®	109	109	105	109			
PBA Slasher®	104	102	101	106	Compromised trial		
PBA Maiden®	106	102	100	100	lisec		
Neelam <sup>⊕</sup>	100	101	101	99	pron		
Genesis <sup>™</sup> 836	93	92	96	92	Com		
PBA Seamer®				84			
Genesis™ 090	73	79	92	73	]		
Sowing date	7 Jun	15 May	27 May	13 Jun	31 May		
Rainfall J–M (mm)	12	104	58	69	26		
Rainfall A–O (mm)	370	203	333	314	125		

Table 2: Mullewa desi chickpea.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.81	1.20	1.77		0.44		
CBA Captain®	105	114	103		103		
PBA Striker®	102	104	105		98		
PBA Slasher®	103	100	103	Trial	92		
Neelam®	98	99	101	results below	102		
PBA Maiden®	99	99	97	standard	113		
Genesis™ 836	96	94	97		104		
Genesis™ 090	77	80	97		112		
Sowing date	7 Jun	15 May	26 May	18 May	31 May		
Rainfall J–M (mm)	3	44	87	58	94		
Rainfall A–O (mm)	152	220	270	264	107		

Special thanks to 2023 trial cooperator, Spring Park Farms.

Special thanks to 2023 trial cooperator. Learn more via the NVT Long Term Yield Reporter Learn more via the NVT Long Term Yield Reporter

CANOLA

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



#### Chickpea variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of chickpea in Western Australia. These ratings are updated annually by crop pathologists and were released in March 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)	Phytophthora root rot*	RLN resistance (Pratylenchus neglectus)*	RLN tolerance (Pratylenchus neglectus)*					
DESI									
CBA Captain <sup>(b)</sup>	MS								
Genesis™ 836	S								
Kyabra <sup>®</sup>	VS								
Neelam®	S								
PBA Boundary®	S								
PBA Drummond <sup>®</sup>	VS								
PBA HatTrick <sup>(b)</sup>	S								
PBA Maiden <sup>®</sup>	S								
PBA Pistol <sup>(b)</sup>	VS								
PBA Seamer <sup>(b)</sup>	MS								
PBA Slasher®	S								
PBA Striker <sup>®</sup>	S								
KABULI									
Almaz <sup>®</sup>	MS								
Genesis™ 090	MS								
Genesis™ Kalkee	S								
PBA Magnus <sup>®</sup>	MS								
PBA Monarch <sup>(b)</sup>	MS								
PBA Royal <sup>®</sup>	MS								

\* ratings will be updated when available. Learn more via the <u>NVT Disease Ratings</u>.

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 <u>nvt.grdc.com.au</u> 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>d)</sup>	Agriculture Victoria	TBC	APB Bondi <sup>(b)</sup> (tested as OZP1903) is a Kaspa-type pea with mid-flowering and mid-maturity. APB Bondi <sup>(b)</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, @ denotes Plant Breeder's Rights apply. 1 All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.



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CANOLA

FIELD PEA CHICKPEA

LENTIL

LUPIN

#### Field pea variety yield performance – Geraldton

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: Mingenew field pea.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.16	3.12	2.16	2.88	0.50		
PBA Butler®	104	103	106	107	107		
APB Bondi <sup>(b)</sup>		108	105	104	106		
PBA Taylor®	106	104	103	104	109		
Kaspa	100	101	100	102	102		
PBA Gunyah®	109	98	99	101	106		
PBA Wharton®	107	101	98	97	106		
PBA Oura®	111	94	100	100	103		
PBA Twilight <sup>®</sup>	106	98	95	93	101		
GIA Ourstar <sup>(b*</sup>		91	88	88	87		
GIA Kastar <sup>(b*</sup>		102	82	80	80		
Sowing date	7 Jun	15 May	27 May	13 Jun	31 May		
Rainfall J–M (mm)	12	104	58	69	26		
Rainfall A–O (mm)	370	203	333	314	125		

Special thanks to 2023 trial cooperator.

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

#### Field pea variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of field pea in 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 (Pratylenchus neglectus)*	RLN resistance (Pratylenchus thornei)*				
APB Bondi <sup>(b)</sup>	S	RMR (S)	RMR						
GIA Kastar <sup>(b</sup>	S	S	RMR						
GIA Ourstar <sup>®</sup>	S (P)	S	S						
Kaspa	S	S	S						
PBA Butler®	MS	S	S						
PBA Gunyah <sup>(b</sup>	S	S	S						
PBA Noosa®	S	MS	S						
PBA Oura®	MS	S	S						
PBA Pearl	MS	S	S						
PBA Percy	MRMS	S	S						
PBA Taylor	S	S	S						
PBA Twilight <sup>®</sup>	S	S	S						
PBA Wharton®	S	S	RMR						
Sturt	MS	S	S						

\* ratings will be updated when available. Learn more via the <u>NVT Disease Ratings</u>.

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



WHEAT

## 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 <u>nvt.grdc.com.au</u> 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	Agriculture Victoria	TBC	ALB Terrier <sup>(b)</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 Asochyta, which is the best in its class. It is broadly adapted to various lentil growing regions of Australia.

\* EPR amount is ex-GST, <sup>(b)</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** 



#### Lentil variety yield performance – Geraldton

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: Mingenew lentil.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		1.69	1.57				
GIA Thunder <sup>(b*</sup>		128	117				
GIA Lightning <sup>()*</sup>		118	109				
PBA Jumbo2 <sup>(b)</sup>		113	108		Compromised trial		
ALB Terrier®			109	Compromised trial			
PBA HighlandXT <sup>()*</sup>	No trial	109	101				
PBA Kelpie XT <sup>(b*</sup>	No trial	104	102		bron		
PBA Bolt		101	96		Com		
PBA Hurricane XT <sup>(b*</sup>		92	99				
PBA Hallmark XT <sup>(b*</sup>	]	91	93				
GIA Leader <sup>(b*</sup>		86	98				
Sowing date		7 Jun	27 May	13 Jun	31 May		
Rainfall J–M (mm)		104	58	69	26		
Rainfall A–O (mm)		203	333	314	125		

Special thanks to 2023 trial cooperator.

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

#### 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 (Pratylenchus neglectus)*	RLN resistance (Pratylenchus thornei) *			
ALB Terrier	MR (P)	R	MRMS (P)					
GIA Leader®	MR (P)	MR (P)	MRMS (P)					
GIA Lightning <sup>®</sup>	MRMS (P)	R (P)	MS (P)					
GIA Metro®	RMR (P)	MR (P)	MRMS (P)					
GIA Sire <sup>(b)</sup>	MRMS (P)	R (P)	MS (P)					
GIA Thunder®	MRMS (P)	R (P)	MRMS (P)					
Nipper®	MR	MRMS	MRMS					
PBA Ace <sup>(b)</sup>	MR	R	MS					
PBA Bolt <sup>®</sup>	MRMS	MR	S					
PBA Hallmark XT®	MRMS	RMR	MRMS					
PBA HighlandXT <sup>®</sup>	MR (P)	MR	MS					
PBA Hurricane XT®	MRMS (P)	RMR	MS					
PBA Jumbo2 <sup>(b)</sup>	RMR	R	MR (P)					
PBA KelpieXT <sup>©</sup>	MRMS	MRMS	MS					

\* ratings will be updated when available. Learn more via the NVT Disease Ratings.

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



WHEAT

BARLEY

CANOLA

CHICKPEA

FIELD PEA

## 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 <u>nvt.grdc.com.au</u> to find trial results for any new varieties released since the publication of this harvest report.

Variety	Breeding company	End point royalty* (\$)	Comments supplied by breeding company <sup>1</sup>
Gidgee <sup>()</sup>	Australian Grain Technologies	TBC	A very high and stable yielding alternative to PBA Jurien <sup>(b)</sup> and Mandelup <sup>(b)</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>(b)</sup> . Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly quicker maturity relative to PBA Jurien <sup>(b)</sup> , slightly slower than Mandelup <sup>(b)</sup> .
Rosemont <sup>()</sup>	Australian Grain Technologies	TBC	A very high yielding alternative to PBA Jurien <sup>(b)</sup> , Coyote <sup>(b)</sup> and Mandelup <sup>(b)</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>(b)</sup> . Taller plant height, may improve harvestability. Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly slower maturity relative to PBA Jurien <sup>(b)</sup> , slightly quicker than Coyote <sup>(b)</sup> .

\* EPR amount is ex-GST,  $^{(b)}$  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** 



#### Lupin variety yield performance – Geraldton

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: Eneabba narrow-leaf lupin.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.81	1.45	3.49	3.55	1.93		
Rosemont <sup>™</sup>				113	106		
Coyote	131	143	105	105	108		
Gidgee			109	114	101		
Lawler®		122	106	108	104		
PBA Jurien®	111	118		106	104		
PBA Bateman®	115	129	102	97	106		
Mandelup <sup>(b)</sup>	103	104	103	103	101		
PBA Gunyidi <sup>(b)</sup>	106	117	99	94	104		
PBA Barlock®	97	103	103	96	102		
Coromup <sup>®</sup>	104	98	88	98	98		
Sowing date	7 Jun	6 May	18 May	2 May	24 May		
Rainfall J–M (mm)	12	114	79	70	18		
Rainfall A–O (mm)	273	257	477	429	212		

Special thanks to 2023 trial cooperator, Jim Heal.

Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 3: Mullewa narrow-leaf lupin.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.72		2.83	2.93			
Rosemont				111			
Coyote <sup>(b)</sup>	108		109	109			
Lawler <sup>(b)</sup>			104	107			
Gidgee <sup>(b)</sup>			100	109			
PBA Jurien <sup>®</sup>	105	Trial		104	Trial		
PBA Bateman®	96	failed	107	102	failed		
Mandelup <sup>⊕</sup>	103		101	102			
Coromup <sup>(b)</sup>	103		100	101			
PBA Gunyidi	92		105	98			
PBA Leeman®	107		97	102			
Sowing date	7 Jun	5 May	14 May	10 May	11 May		
Rainfall J–M (mm)	3	44	87	58	94		
Rainfall A–O (mm)	152	220	270	264	107		

Special thanks to 2023 trial cooperator, Spring Park Farms. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 2: Mingenew narrow-leaf lupin.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.29	1.25	3.52	2.73	1.98		
Coyote	181	128	107	113	108		
Rosemont <sup>₯</sup>				118	107		
PBA Bateman®	152	122	106	104	105		
Lawler®		112	104	111	105		
PBA Jurien®	99	110		110	104		
Gidgee <sup>(b)</sup>			102	113	103		
PBA Gunyidi <sup>(b)</sup>	136	115	104	99	102		
Mandelup <sup>(b)</sup>	99	102	102	103	101		
PBA Barlock <sup>(b)</sup>	90	104	104	99	101		
Coromup	142	100	93	96	98		
Sowing date	7 Jun	12 Jun	18 May	5 May	6 May		
Rainfall J–M (mm)	12	87	67	50	6		
Rainfall A–O (mm)	370	302	419	362	219		

Special thanks to 2023 trial cooperator.

Learn more via the NVT Long Term Yield Reporter

Table 4: Yuna narrow-leaf lupin.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.97		2.38	2.82				
Rosemont				107				
PBA Jurien <sup>®</sup>	114			106				
Gidgee®			111	104				
Lawler®			108	104	Trial			
Coyote <sup>(b)</sup>	110	Trial	106	104				
PBA Bateman®	105	failed	103	103	failed			
Mandelup <sup>®</sup>	104		104	102				
PBA Barlock <sup>(b)</sup>	103		103	102				
PBA Gunyidi <sup>(b)</sup>	99	1	98	101				
PBA Leeman®	89		89	94				
Sowing date	7 Jun	6 May	14 May	28 Apr	11 May			
Rainfall J–M (mm)	7	37	71	32	22			
Rainfall A–O (mm)	195	174	340	270	95			

Special thanks to 2023 trial cooperator, Helenore Farms. Learn more via the <u>NVT Long Term Yield Reporter</u>



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

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



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