

Geraldton

March 2025



NVT HARVEST REPORT

INTERIM VERSION





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

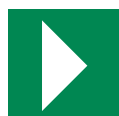
PHOTO: Nicole Baxter

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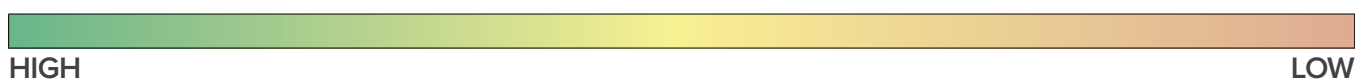
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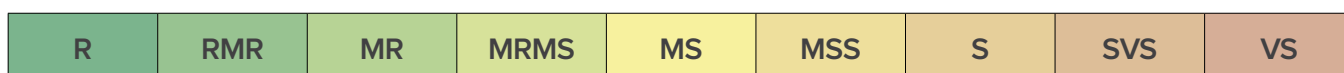
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LEGEND: MEAN VARIETY YIELD PERFORMANCE



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

LEGEND: DISEASE RATING COLOUR RANGE



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

The disease ratings in the report are current at the time of publication.

Regularly visit nvt.grdc.com.au/nvt-disease-ratings to find the latest NVT disease ratings.

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

INTRODUCTION

The NVT Harvest Report – 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 2024 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 20th anniversary

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

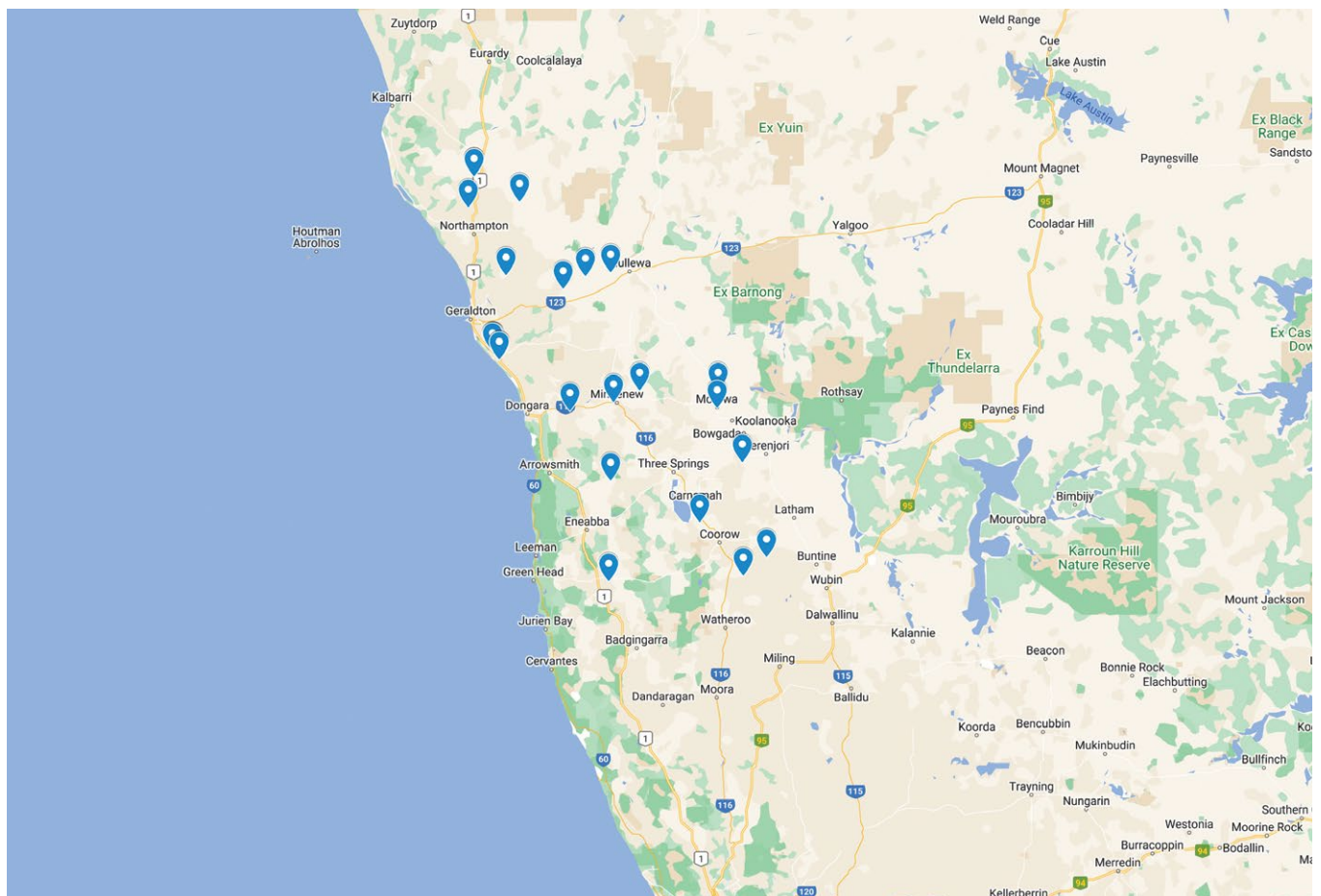
Established in 2005 by the Grains Research and Development Corporation (GRDC), the NVT program has evolved into the largest coordinated variety trial network in the world. Each year, more than 640 trials are conducted across over 300 locations nationwide, encompassing 10 different crop species. Over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

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

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

NVT SITE LOCATIONS – Geraldton

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



SOURCE: National Variety Trials

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

WHEAT

New wheat varieties

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

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

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

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

Wheat variety yield performance – 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: Carnamah main season wheat.

Year		2020	2021	2022	2023	2024				
Mean yield (t/ha)	Class					2.94				
LRPB Avenger ^{db}	APW (N)	No trial	No trial	No trial	No trial	120				
LRPB Anvil ^{db} CL Plus	AH					117				
Vixen ^{db}	AH (N)					116				
LRPB Havoc ^{db}	AH (N)					114				
Tomahawk CL Plus ^{db}	APW					111				
Sting ^{db}	AH					111				
LRPB Vortex ^{db}	APW					110				
Scepter ^{db}	AH					107				
Borlaug 100 ^{db}	FEED					106				
Lancelin ^{db}						105				
Mace ^{db}	AH (N)					105				
Calibre ^{db}	AH					105				
Devil ^{db}	AH (N)					104				
Shotgun ^{db}						103				
Zen ^{db}	ANW					103				
Sowing date										1 Jun
Rainfall J–M (mm)										25
Rainfall A–O (mm)										284

Special thanks to 2024 trial cooperator, Chris Spencer of Mount Gerizim Farms, Yallembee. Learn more via the [NVT Long Term Yield Reporter](#)

Table 2: Coorow main season wheat.

Year		2020	2021	2022	2023	2024	
Mean yield (t/ha)	Class	3.21	4.30	5.01	0.67		
LRPB Vortex ^{db}	APW			112	81	No trial	
Tomahawk CL Plus ^{db}	APW			108	123		
Vixen ^{db}	AH (N)	107	110	100	153		
Brumby ^{db}	APW (N)		105	111	93		
Calibre ^{db}	AH	105	101	109	128		
Devil ^{db}	AH (N)	104	105	109	101		
Scepter ^{db}	AH	105	107	105	112		
Sting ^{db}	AH	105	105	102	145		
Thumper ^{db}	AH				88		
LRPB Avenger ^{db}	APW (N)	105		91	156		
RockStar ^{db}	AH (N)	102	105	113	61		
LRPB Havoc ^{db}	AH (N)	106	112	93	130		
Ballista ^{db}	FEED		99	109	112		
LRPB Matador ^{db}	FEED			110	105		
Lancelin ^{db}				102	121		
Sowing date		25 May	13 May	12 May	16 May		
Rainfall J–M (mm)		91	98	58	23		
Rainfall A–O (mm)		172	330	242	138		

No 2024 trial cooperator. Learn more via the [NVT Long Term Yield Reporter](#)

Table 3: Eneabba main season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class	4.44	3.90	5.77	1.93	3.97
LRPB Vortex ^{db}	APW			112	104	111
Rottnest ^{db}						107
RockStar ^{db}	AH (N)	112	105	115	103	105
Thumper ^{db}	AH				107	104
Brumby ^{db}	APW (N)		103	111	110	107
Shotgun ^{db}						106
Tomahawk CL Plus ^{db}	APW			106	118	111
Devil ^{db}	AH (N)	109	102	109	111	106
Splendid ^{db}						104
Firefly ^{db}	ANW		98		103	101
Calibre ^{db}	AH	108	98	107	114	105
Scepter ^{db}	AH	105	104	104	112	107
LRPB Matador ^{db}	FEED			110	113	103
Kinsei ^{db}	ANW	109	103	113	93	99
Ninja ^{db}	ANW	107	99	109	108	103
Sowing date		7 May	15 May	6 May	31 May	5 Jun
Rainfall J–M (mm)		70	79	70	18	6
Rainfall A–O (mm)		275	477	429	212	366

Special thanks to 2024 trial cooperator, Jim Heal. Learn more via the [NVT Long Term Yield Reporter](#)

Table 4: Eradu main season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class		2.09	3.74	2.06	3.54
LRPB Vortex ^{db}	APW	Compromised trial		112	112	115
Tomahawk CL Plus ^{db}	APW			110	110	108
Rottnest ^{db}						105
RockStar ^{db}	AH (N)		109	113	109	106
Brumby ^{db}	APW (N)		112	110	109	106
Shotgun ^{db}						104
Devil ^{db}	AH (N)		111	109	108	105
Scepter ^{db}	AH		112	107	106	106
Thumper ^{db}	AH				110	103
Splendid ^{db}						102
Vixen ^{db}	AH (N)		116	101	106	108
LRPB Havoc ^{db}	AH (N)		111	104	101	109
Zen ^{db}	ANW		104	110	100	106
Ninja ^{db}	ANW		105	110	105	102
Calibre ^{db}	AH		111	104	109	102
Sowing date			25 May	26 May	21 May	10 May
Rainfall J–M (mm)		63	79	46	69	47
Rainfall A–O (mm)		201	343	329	151	568

Special thanks to 2024 trial cooperator, Peter Freeman. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT
BARLEY
CANOLA
CHICKPEA
FIELD PEA
LENTIL
LUPIN

Table 5: Mingenew main season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class	4.33	4.11	5.02	1.57	5.24
LRPB Vortex ^{db}	APW			113	110	112
Tomahawk CL Plus ^{db}	APW			108	116	112
Rottnest ^{db}						106
Shotgun ^{db}						107
Brumby ^{db}	APW (N)		110	108	110	107
Vixen ^{db}	AH (N)	100	109	105	110	114
Thumper ^{db}	AH				107	104
Devil ^{db}	AH (N)	106	108	107	110	107
RockStar ^{db}	AH (N)	107	111	108	107	103
Scepter ^{db}	AH	103	109	105	110	108
Calibre ^{db}	AH	106	104	107	110	107
Sting ^{db}	AH	101	105	105	108	110
Splendid ^{db}						102
LRPB Avenger ^{db}	APW (N)	93		102	103	114
LRPB Havoc ^{db}	AH (N)	96	110	99	109	111
Sowing date		7 May	13 May	19 May	31 May	1 Jun
Rainfall J–M (mm)		104	68	69	7	31
Rainfall A–O (mm)		203	434	314	221	371

Special thanks to 2024 trial cooperator, IB Thomas & Son.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 6: Morawa main season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class	1.35	2.25	4.31		3.64
Tomahawk CL Plus ^{db}	APW			110		110
LRPB Vortex ^{db}	APW			111		109
Vixen ^{db}	AH (N)	112	120	101		110
Shotgun ^{db}						107
Rottnest ^{db}						106
Calibre ^{db}	AH	110	103	110		107
Brumby ^{db}	APW (N)		100	113		106
Devil ^{db}	AH (N)	106	101	111		106
Thumper ^{db}	AH					105
Sting ^{db}	AH	111	113	102		107
Scepter ^{db}	AH	108	107	106		107
LRPB Matador ^{db}	FEED					104
RockStar ^{db}	AH (N)	100	94	114		104
Lancelin ^{db}				104		105
LRPB Avenger ^{db}	APW (N)	107		89		108
Sowing date		25 May	15 May	13 May	31 May	1 May
Rainfall J–M (mm)		111	78	83	24	36
Rainfall A–O (mm)		145	297	329	99	321

Special thanks to 2024 trial cooperator, Morawa Ag College.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 7: Mullewa main season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class	1.86	4.70	5.14	2.33	2.41
LRPB Avenger ^{db}	APW (N)	123		108	103	130
Vixen ^{db}	AH (N)	123	115	112	107	122
LRPB Anvil ^{db} CL Plus	AH	126	114	106	103	126
Tomahawk CL Plus ^{db}	APW			114	108	114
LRPB Havoc ^{db}	AH (N)	119	113	108	104	121
Sting ^{db}	AH	118	111	110	106	115
LRPB Vortex ^{db}	APW			111	105	115
Scepter ^{db}	AH	110	108	109	105	109
Calibre ^{db}	AH	111	106	110	106	106
Lancelin ^{db}				107	104	107
Devil ^{db}	AH (N)	105	106	109	105	104
Shotgun ^{db}					106	102
Brumby ^{db}	APW (N)		105	109	105	103
Rottnest ^{db}						99
Mace ^{db}	AH (N)	113	103	103	103	106
Sowing date		25 May	11 May	18 May	11 May	1 Jun
Rainfall J–M (mm)		81	126	63	94	49
Rainfall A–O (mm)		209	278	268	107	447

Special thanks to 2024 trial cooperator, Spring Park Farms.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 8: Nabawa main season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class	4.82	6.32	5.67	3.15	4.98
LRPB Vortex ^{db}	APW			114	110	111
RockStar ^{db}	AH (N)	111	106	115	105	111
Denison ^{db}	APW	109	103	117	98	114
Rottnest ^{db}						108
Thumper ^{db}	AH				106	109
Kinsei ^{db}	ANW	109	101	114	100	111
Brumby ^{db}	APW (N)		106	109	107	106
Shotgun ^{db}						105
Splendid ^{db}						106
Firefly ^{db}	ANW		100		103	108
Devil ^{db}	AH (N)	107	105	107	107	105
Tomahawk CL Plus ^{db}	APW			103	111	102
Valiant ^{db} CL Plus	AH		98	114	93	112
Ninja ^{db}	ANW	107	102	107	103	105
Cutlass ^{db}	APW (N)	106	96	114	93	111
Sowing date		25 May	15 May	10 May	31 May	29 May
Rainfall J–M (mm)		35	40	39	18	53
Rainfall A–O (mm)		279	404	445	226	528

Special thanks to 2024 trial cooperator, Jason Stokes.
Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT
BARLEY
CANOLA
CHICKPEA
FIELD PEA
LENTIL
LUPIN

Table 9: Ogilvie main season wheat.

Year	Class	2020	2021	2022	2023	2024
Mean yield (t/ha)		4.20	5.40		1.37	5.56
LRPB Vortex ^{db}	APW			Compromised trial	104	112
Tomahawk CL Plus ^{db}	APW				110	107
Rottnest ^{db}						108
Vixen ^{db}	AH (N)	109	108		106	103
Shotgun ^{db}						106
Brumby ^{db}	APW (N)		105		107	107
Scepter ^{db}	AH	106	105		107	105
Devil ^{db}	AH (N)	105	105		106	106
RockStar ^{db}	AH (N)	101	105		104	109
LRPB Havoc ^{db}	AH (N)	107	106		106	102
Thumper ^{db}	AH				104	107
Calibre ^{db}	AH	107	104		106	103
Sting ^{db}	AH	107	105		105	102
Splendid ^{db}						106
LRPB Avenger ^{db}	APW (N)	105			99	100
Sowing date		25 May	12 May		4 May	1 Jun
Rainfall J–M (mm)		30	61	22	14	21
Rainfall A–O (mm)		227	510	403	128	501

Special thanks to 2024 trial cooperators, Falcarragh Farms. Learn more via the [NVT Long Term Yield Reporter](#)

Table 10: Warradarge main season wheat.

Year	Class	2020	2021	2022	2023	2024
Mean yield (t/ha)						4.77
LRPB Vortex ^{db}	APW	No trial	No trial	No trial	No trial	110
Rottnest ^{db}						109
RockStar ^{db}	AH (N)					109
Tomahawk CL Plus ^{db}	APW					107
Zen ^{db}	ANW					107
Brumby ^{db}	APW (N)					107
Splendid ^{db}						107
Thumper ^{db}	AH					106
Shotgun ^{db}						106
Devil ^{db}	AH (N)					106
Ninja ^{db}	ANW					106
Scepter ^{db}	AH					105
Kinsei ^{db}	ANW					105
Firefly ^{db}	ANW					105
Denison ^{db}	APW					105
Sowing date						
Rainfall J–M (mm)						11
Rainfall A–O (mm)						468

Special thanks to 2024 trial cooperators, Warradarge Springs. Learn more via the [NVT Long Term Yield Reporter](#)

Table 11: Yuna main season wheat.

Year	Class	2020	2021	2022	2023	2024
Mean yield (t/ha)		3.23	5.59	4.26		2.80
LRPB Vortex ^{db}	APW			115	Compromised trial	111
Tomahawk CL Plus ^{db}	APW			109		104
RockStar ^{db}	AH (N)	104	107	118		105
Rottnest ^{db}						103
Zen ^{db}	ANW	108	108	108		105
Brumby ^{db}	APW (N)		108	112		103
LRPB Havoc ^{db}	AH (N)	112	113	98		105
Devil ^{db}	AH (N)	104	108	110		103
Scepter ^{db}	AH	106	109	106		103
Shotgun ^{db}						101
Vixen ^{db}	AH (N)	109	112	96		103
Splendid ^{db}						101
Thumper ^{db}	AH					102
Ninja ^{db}	ANW	101	103	112		101
Denison ^{db}	APW	101	100	112		106
Sowing date		25 May	11 May	5 May		1 Jun
Rainfall J–M (mm)		37	71	32	22	37
Rainfall A–O (mm)		174	340	270	95	434

Special thanks to 2024 trial cooperators, Helenore Farms. Learn more via the [NVT Long Term Yield Reporter](#)

Table 12: Eneabba early season wheat.

Year	Class	2020	2021	2022	2023	2024
Mean yield (t/ha)		4.40	4.62	5.54	1.98	4.54
Firefly ^{db}	ANW					108
Denison ^{db}	APW	112	107	105	130	107
Valiant ^{db} CL Plus	AH		102	100	128	109
Wallaroo ^{db}					101	101
Cutlass ^{db}	APW (N)	105	100	103	117	111
RockStar ^{db}	AH (N)	111	110	89	145	99
Catapult ^{db}	AH	107	108	91	135	105
Kinsei ^{db}	ANW	109	108	94	134	99
Brumby ^{db}	APW (N)				140	102
Mammoth ^{db}	APW				116	91
Longsword ^{db}	AWW	95	99	117	61	103
Mowhawk ^{db}	AH			127		87
Stockade ^{db}	APW			112	88	96
Yitpi	AH	97	100	91	106	106
Brighton ^{db}					56	94
Sowing date		22 Apr	21 Apr	12 Apr	19 Apr	23 Apr
Rainfall J–M (mm)		70	79	70	18	6
Rainfall A–O (mm)		275	477	429	212	366
Irrigation A–O (mm)					10	45

Special thanks to 2024 trial cooperators, Jim Heal. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT

BARLEY

CANOLA

CHICKPEA

FIELD PEA

LENTIL

LUPIN

Table 13: Ogilvie early season wheat.

Year		2020	2021	2022	2023	2024
Mean yield (t/ha)	Class		5.17	5.36	1.13	
Wallaroo ^{db}		Compromised trial			113	Trial failed
Denison ^{db}	APW		107	108	129	
Cutlass ^{db}	APW (N)		106	110	121	
Valiant ^{db} CL Plus	AH		105	106	132	
Longsword ^{db}	AWW		104	121	60	
Brighton ^{db}					58	
Mammoth ^{db}	APW				137	
Stockade ^{db}	APW			110	104	
Catapult ^{db}	AH		103	93	127	
Kinsei ^{db}	ANW		102	91	127	
Yitpi	AH		99	95	103	
RockStar ^{db}	AH (N)		101	86	136	
Brumby ^{db}	APW (N)				130	
Illabo ^{db}	AH		96	104	55	
Magenta ^{db}	APW		95	84	106	
Sowing date		4 May	21 Apr	14 Apr	21 Apr	18 Apr
Rainfall J–M (mm)		30	61	22	14	21
Rainfall A–O (mm)		227	510	403	128	501
Irrigation A–O (mm)		10			10	40

Special thanks to 2024 trial cooperator.
 Learn more via the [NVT Long Term Yield Reporter](#)

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 2023 and 2024 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 seven NVT sites in Geraldton in 2023.

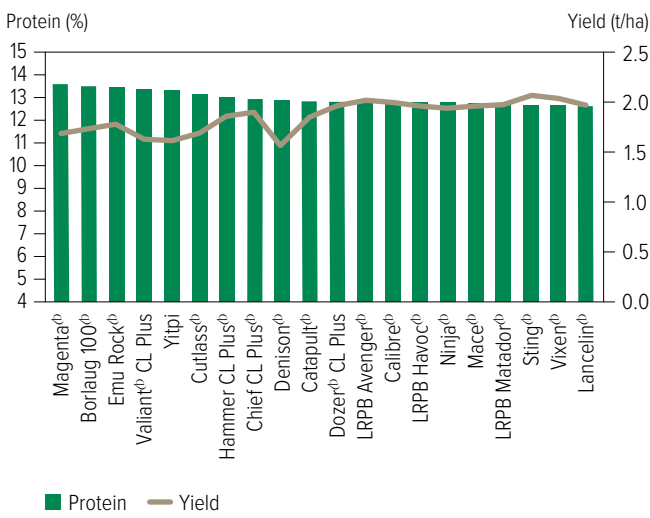


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from 10 NVT sites in Geraldton in 2024.

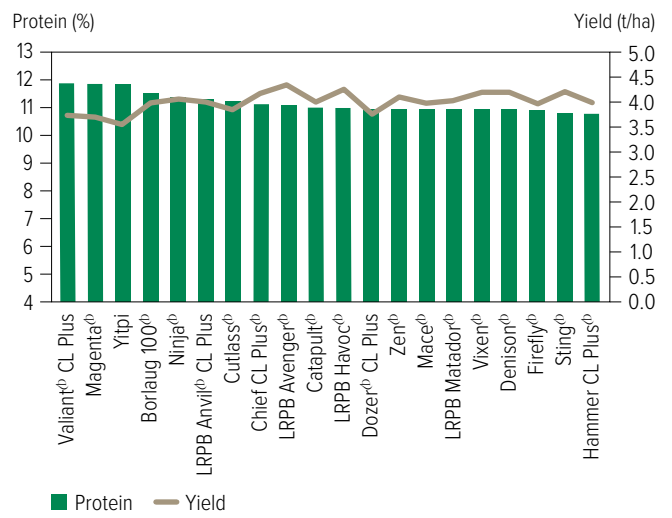


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Geraldton in 2023.

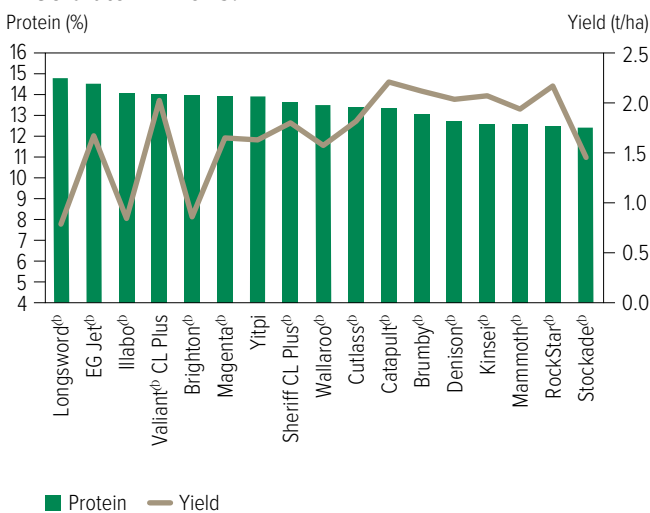
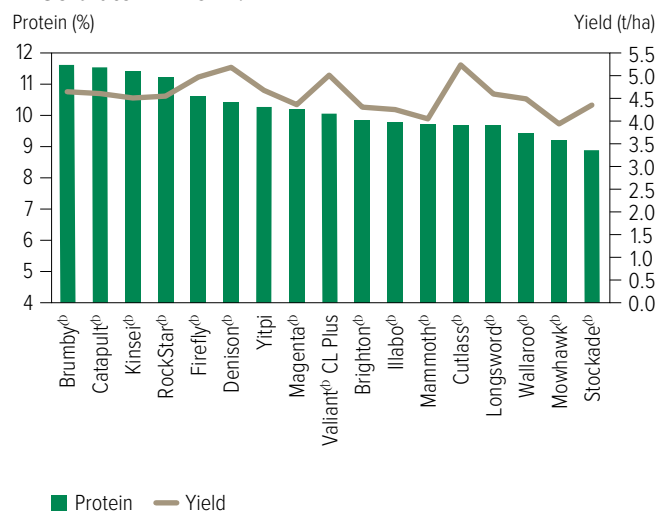


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Geraldton in 2024.



Test weight comparisons

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

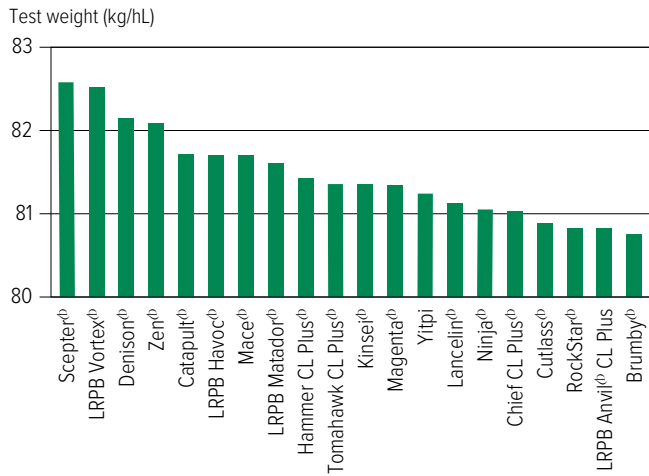


Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from 10 NVT sites in Geraldton in 2024.

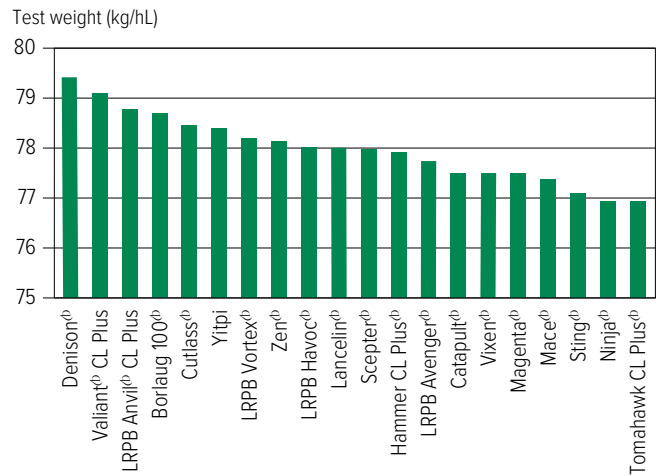


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Geraldton in 2023.

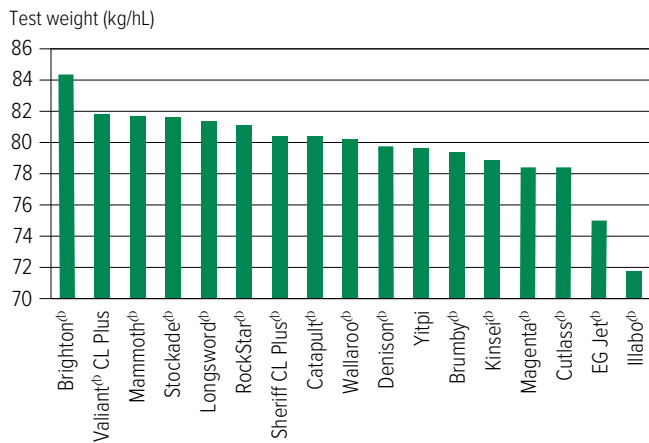
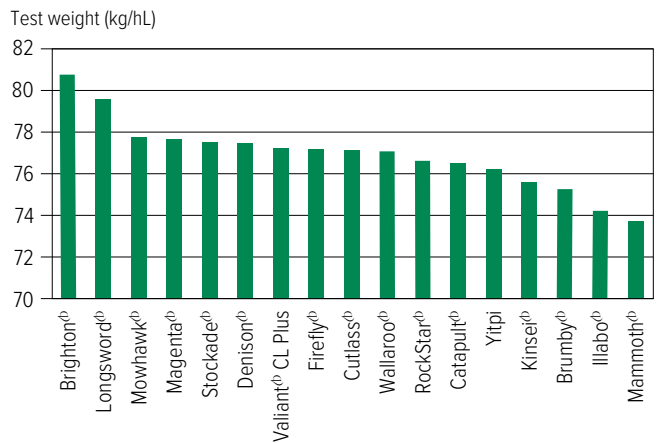


Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Geraldton in 2024.



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Screenings comparisons

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

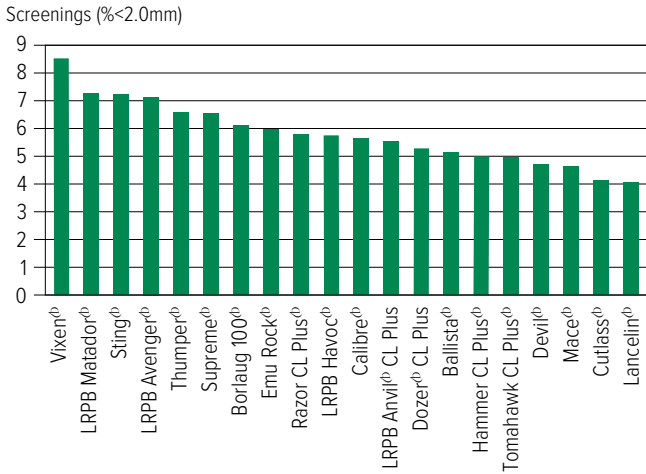


Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from 10 NVT sites in Geraldton in 2024.

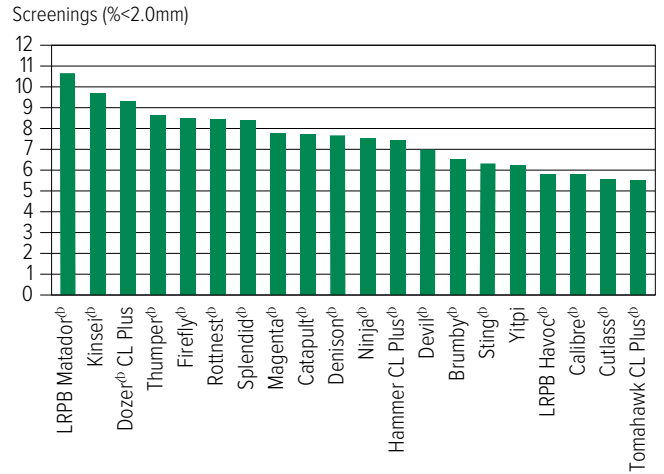


Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Geraldton in 2023.

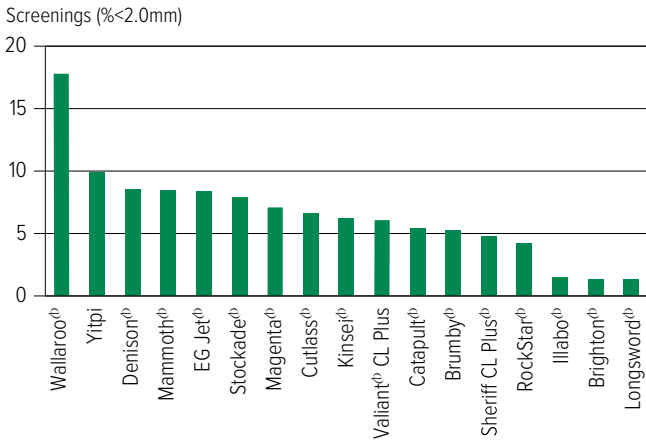
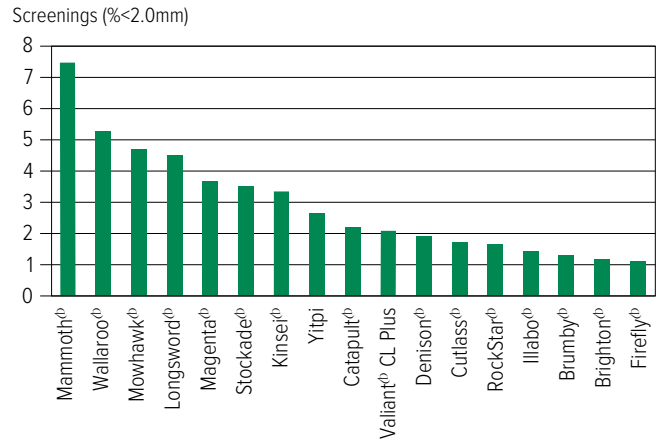


Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Geraldton in 2024.



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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 2025.

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

Table 14: Wheat disease guide for Western Australia.

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

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Table 14: Wheat disease guide for Western Australia (continued).

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

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

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

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

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

^ line contains a few susceptible off types, () show outlier.

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Wheat variety maturity

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

Table 15: An industry guide for wheat variety maturity description.

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

Source: [Australian Crop Breeders Ltd](#)

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Wheat optimum time of sowing – an example for Geraldton

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

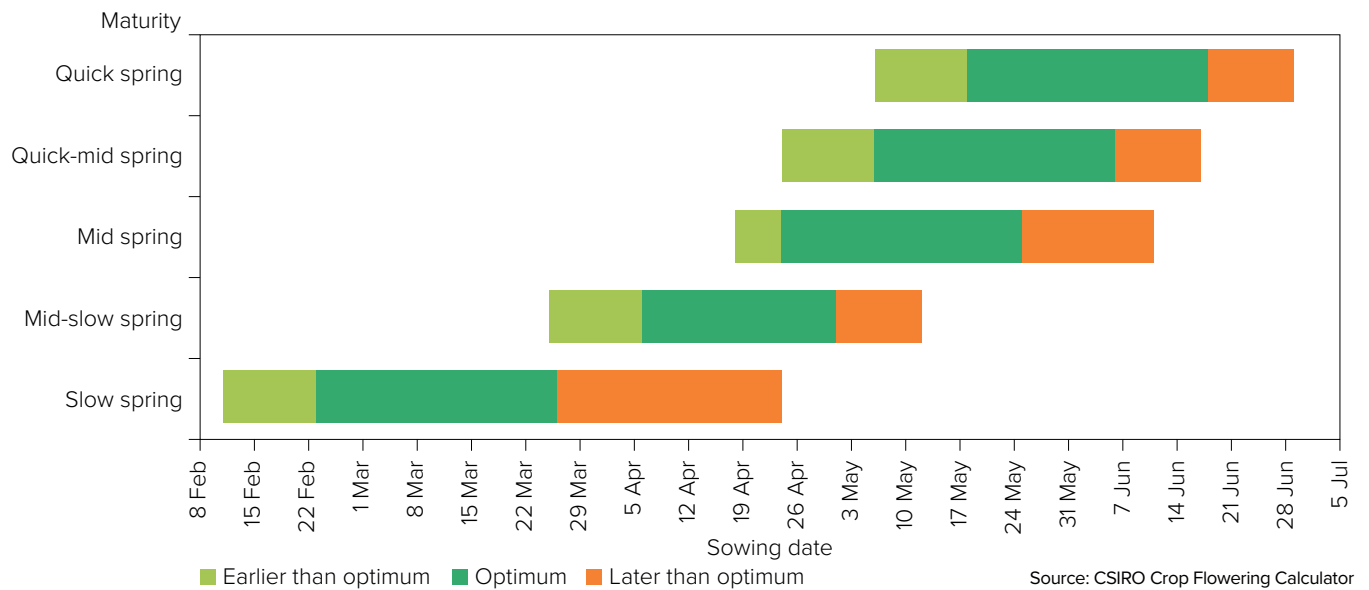
Growers and advisers are encouraged to use the [Crop Flowering Calculator](#) to compare the impact of specific variety selection and sowing date for the ideal flowering window at their own location. The Crop Flowering Calculator is a simple phenology (maturity) model that uses 60 years of local weather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

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

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

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

Figure 13: Optimum time of sowing by variety maturity for Mingeneew as an example for Geraldton.



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

BARLEY

New barley varieties

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

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

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

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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: Carnamah main season barley.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)					3.94
Beast ^{db}					116
Bigfoot CL ^{db*}					111
Compass ^{db}					111
Leabrook ^{db}					110
Cyclops ^{db}					110
Combat ^{db}					110
Maximus ^{db} CL*					109
Granite ^{db} CL*	No trial	No trial	No trial	No trial	108
Fathom ^{db}					107
PegasusAX ^{db*}					107
Commodus ^{db} CL*					107
Laperouse ^{db}					107
Titan AX ^{db*}					106
Rosalind ^{db}					106
La Trobe ^{db}					105
Sowing date					1 Jun
Rainfall J–M (mm)					25
Rainfall A–O (mm)					284

Special thanks to 2024 trial cooperator, Chris Spencer of Mount Gerizim Farms, Yallembee.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 2: Eneabba main season barley.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)					3.67
PegasusAX ^{db*}					115
Rosalind ^{db}					115
Maximus ^{db} CL*					110
Neo ^{db} CL*					109
Beast ^{db}					109
Litmus ^{db}					109
La Trobe ^{db}					106
Spartacus CL ^{db*}	No trial	No trial	No trial	No trial	106
Bigfoot CL ^{db*}					105
Cyclops ^{db}					104
Minotaur ^{db}					104
Combat ^{db}					104
Spinnaker ^{db}					103
Compass ^{db}					103
Leabrook ^{db}					103
Sowing date					5 Jun
Rainfall J–M (mm)					6
Rainfall A–O (mm)					366

Special thanks to 2024 trial cooperator, Jim Heal.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 3: Eradu main season barley.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)		2.45	4.59	2.18	4.68
Combat ^{db}	Compromised trial	118	109	116	109
PegasusAX ^{db*}					113
Neo ^{db} CL*				107	115
Rosalind ^{db}		110	105	110	112
Beast ^{db}		117	104	107	105
Leabrook ^{db}		111	105	104	103
Minotaur ^{db}		104	104	105	106
Cyclops ^{db}		106	106	100	104
Bigfoot CL ^{db*}					103
Spinnaker ^{db}			104	103	106
Compass ^{db}		112	102	103	100
Titan AX ^{db*}			104	102	99
Litmus ^{db}		103	98	107	104
Maximus ^{db} CL*		103	100	99	105
Fathom ^{db}		111	98	107	98
Sowing date		25 May	26 May	21 May	10 May
Rainfall J–M (mm)	63	79	46	69	47
Rainfall A–O (mm)	201	343	329	151	568

Special thanks to 2024 trial cooperator, Peter Freeman.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 4: Mingenew main season barley.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)	5.07	4.62	5.77	1.63	3.73
Neo ^{db} CL*				107	112
Combat ^{db}		118	110	120	114
Rosalind ^{db}	105	116	106	118	117
PegasusAX ^{db*}					116
Beast ^{db}	102	105	105	124	117
Maximus ^{db} CL*	99	115	102	114	117
Cyclops ^{db}	104	108	106	113	113
Minotaur ^{db}	104	114	105	108	109
Granite ^{db} CL*					112
Leabrook ^{db}	103	97	105	114	109
Bigfoot CL ^{db*}					111
Laperouse ^{db}	100	105	102	107	108
Fathom ^{db}	99	106	100	110	104
Spartacus CL ^{db*}	96	109	98	106	109
La Trobe ^{db}	98	105	99	109	108
Sowing date	7 May	13 May	12 May	31 May	1 Jun
Rainfall J–M (mm)	104	68	69	7	31
Rainfall A–O (mm)	203	434	314	221	371

Special thanks to 2024 trial cooperator, Altora Ag – Erregulla Plains.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

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 LUPIN

Table 5: Yuna main season barley.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)	3.90	5.08	5.39		3.63
Combat ^{db}		112	110	Trial failed	114
Cyclops ^{db}	99	111	109		113
Beast ^{db}	107	107	108		111
Neo ^{db} CL*					109
Maximus ^{db} CL*	102	112	101		109
Bigfoot CL ^{db*}					108
Leabrook ^{db}	104	102	108		108
Laperouse ^{db}	99	107	106		108
Minotaur ^{db}	100	109	103		107
Rosalind ^{db}	108	110	97		105
PegasusAX ^{db*}					104
Fathom ^{db}	102	102	105		106
Titan AX ^{db*}			109		105
Compass ^{db}	106	97	106		104
Spartacus CL ^{db*}	101	106	98		103
Sowing date	25 May	11 May	5 May	1 Jun	1 Jun
Rainfall J–M (mm)	37	71	32	22	37
Rainfall A–O (mm)	174	340	270	95	434

Special thanks to 2024 trial cooperator, Helenore Farms.

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

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 2023 and 2024 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 two NVT sites in Geraldton in 2023.

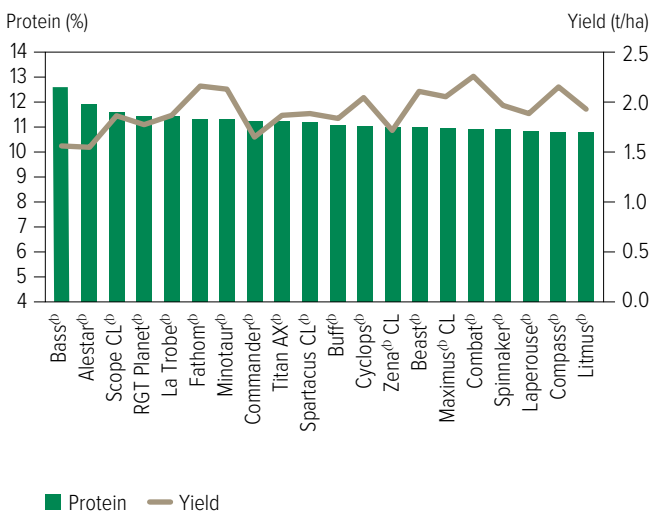
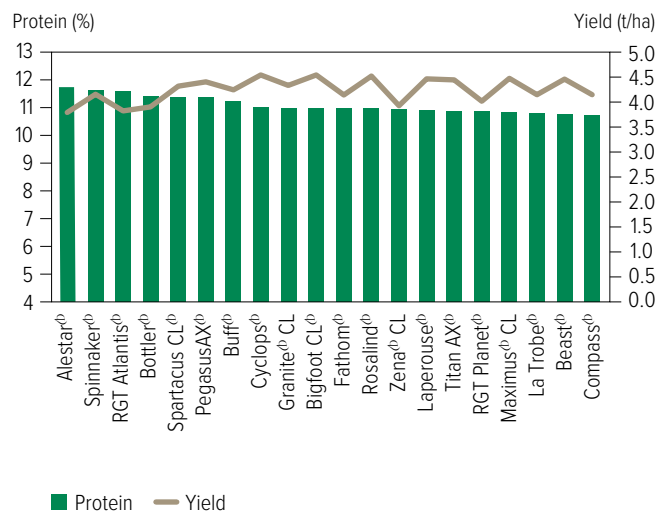


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from five NVT sites in Geraldton in 2024.



Test weight comparisons

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

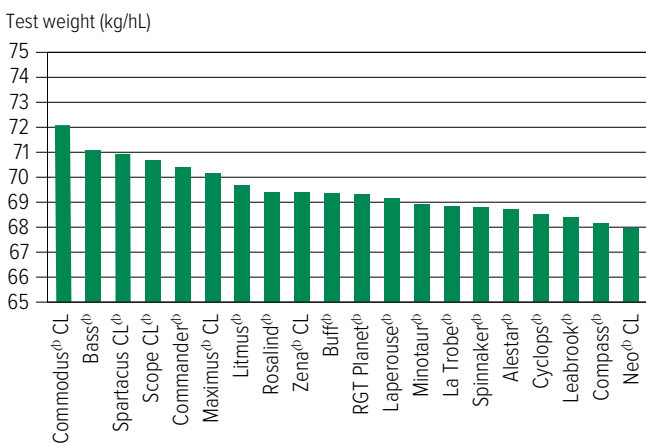
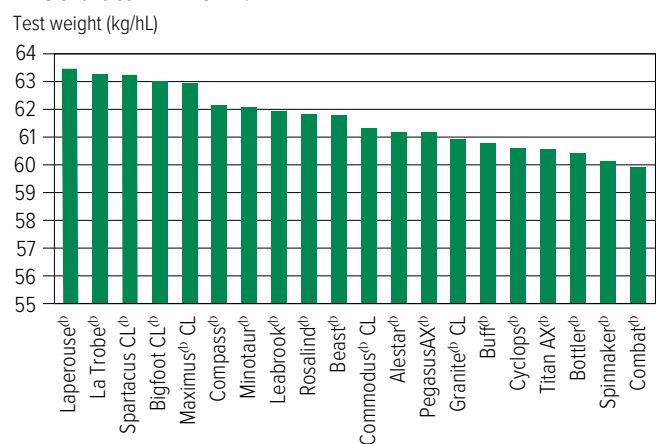


Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from five NVT sites in Geraldton in 2024.



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Screenings comparisons

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

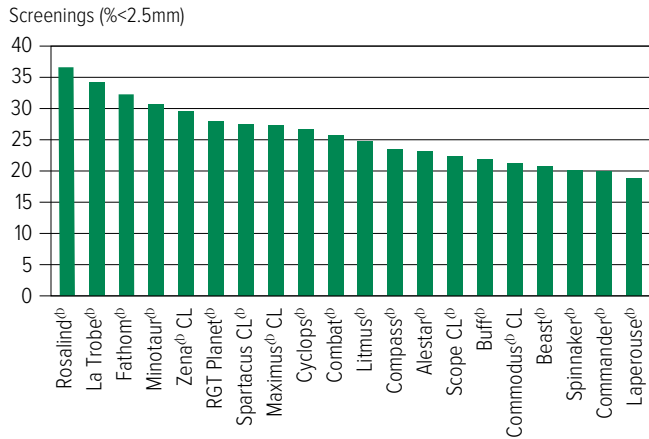
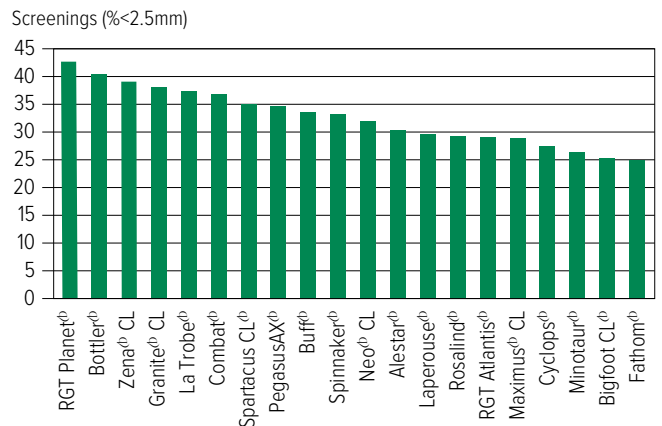


Figure 6: Screenings (<2.5mm) comparisons for main season barley varieties from five NVT sites in Geraldton in 2024.



Retention comparisons

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

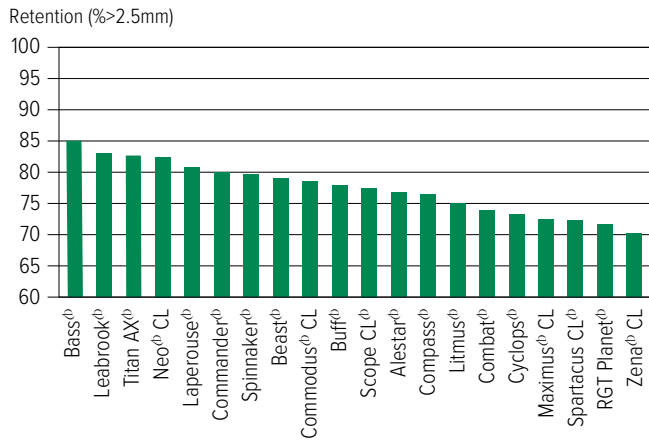
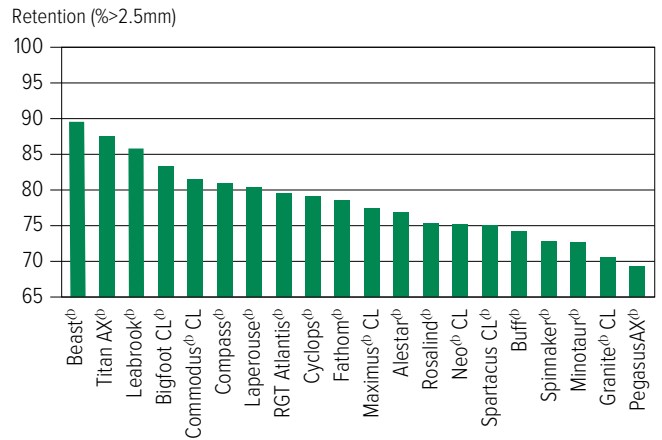


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from five NVT sites in Geraldton in 2024.



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Barley variety disease ratings – Western Australia

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

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

Table 6: Barley disease guide for Western Australia.

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

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

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

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

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

^a line contains a few susceptible off types, () show outlier.

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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 to find trial results for any new varieties released since the publication of this harvest report.

Variety	Breeding company	End point royalty* (\$)	Comments supplied by breeding company ¹
DG Buller G	Nutrien Ag Solutions Ltd	N/A	DG Buller G will be available to growers in 2025. It is a 5 series, Optimum GLY [®] hybrid. DG Buller G is medium height with good standability. It has good oil content.
InVigor [®] LR 3540P	BASF Australia Ltd	N/A	InVigor [®] LR 3540P is an early maturing hybrid with PodGuard [®] . InVigor [®] LR 3540P contains dual herbicide tolerance to Liberty [®] and Truflex [®] . InVigor [®] LR 3540P combines the flexibility of PodGuard [®] and dual herbicide tolerance with early maturity. InVigor [®] LR 3540P is suited to lower-rainfall and shorter-season areas.
InVigor [®] LR 5040P	BASF Australia Ltd	N/A	InVigor [®] LR5040P is a mid-season hybrid with PodGuard [®] . InVigor [®] LR5040P contains dual herbicide tolerance to Liberty [®] and Truflex [®] . InVigor [®] LR5040P combines the flexibility of PodGuard [®] and dual herbicide tolerance with high yield and oil results. InVigor [®] LR5040P is suited to mid-season growing regions.
Nuseed [®] Griffon TTI	Nuseed Pty Ltd	N/A	Nuseed [®] Griffon TTI is Nuseed's first dual-herbicide hybrid canola, with triazine and IMI tolerance for flexible, effective crop protection. It is an early-mid maturing variety ideal for target yield environments of 0.5 to 3t/ha, which ensures fast pod development to safeguard yield. Commercial release in 2025. Rapid pod development for higher yields and a shorter growing season.
Pioneer [®] PY323G	Pioneer	N/A	Pioneer [®] PY323G (coded AA1421G) is an early maturing Optimum GLY [®] hybrid variety. Suited to early and early-mid season growing regions, it is medium in height. First tested in NVT 2023. Marketed by Pioneer Seeds.
Pioneer [®] PY327C	Pioneer	N/A	Pioneer [®] PY327C (coded AA0424I) is an early maturing Clearfield [®] hybrid suited to medium to high rainfall zones. It has mid-fast phenology and a medium-tall plant height. First tested in NVT 2023. Marketed by Pioneer Seeds.
Pioneer [®] PY422G	Pioneer	N/A	Pioneer [®] PY422G (coded AA1418G) is an early-mid maturing Optimum GLY [®] hybrid suited to early-mid and mid-season growing regions with medium height. First tested in NVT 2023. Marketed by Pioneer Seeds.
Pioneer [®] PY424GC	Pioneer	N/A	Pioneer [®] PY424GC (coded WW1958W) is an early-mid maturing combination Optimum GLY [®] and Clearfield [®] hybrid suited to early and early-mid season growing regions. It has medium height. First tested in NVT 2023. Marketed by Pioneer Seeds.
Pioneer [®] PY428R	Pioneer	N/A	Pioneer [®] PY428R (coded D257-18) is an early-mid maturing Roundup Ready [®] hybrid suited to early and early-mid season growing regions and is medium in height. First tested in NVT 2023. Marketed by Pioneer Seeds.
Pioneer [®] PY429T	Pioneer	N/A	Pioneer [®] PY429T (coded AA902T) is a widely adapted early-mid maturing triazine-tolerant hybrid. Best suited to medium to medium-high rainfall zones. Medium plant height. First tested in NVT 2023. Marketed by Pioneer Seeds.

*EPR amount is ex-GST, ⁰denotes Plant Breeder's Rights apply. ¹All 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

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: Carnamah low-med rainfall GLY.

Year	2020	2021	2022	2023	2024				
Mean yield (t/ha)					2.48				
Nuseed® Hunter TF	No trial	No trial	No trial	No trial	110				
InVigor® LR 4540P					108				
Pioneer® PY428R					107				
Hyola® Regiment XC					103				
Nuseed® Raptor TF					103				
Pioneer® 44Y27 RR					103				
Pioneer® PY323G					102				
Nuseed® Emu TF					102				
Pioneer® PY424GC					101				
InVigor® R 4520P					100				
Sowing date									1 Jun
Rainfall J–M (mm)									25
Rainfall A–O (mm)					284				

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

Table 2: Coorow low-med rainfall GLY.

Year	2020	2021	2022	2023	2024			
Mean yield (t/ha)		3.46	3.03					
InVigor® LR 4540P	Trial failed		107	Compromised trial	No trial			
Nuseed® Hunter TF		110	108					
InVigor® R 4520P		107	102					
Pioneer® 44Y27 RR		105	103					
Pioneer® 44Y30 RR		104	103					
Nuseed® Raptor TF		102	102					
InVigor® R 4022P		102	100					
Nuseed® Emu TF		98	102					
InVigor® LR 3540P			98					
Hyola® Garrison XC			100					
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				

No 2024 trial cooperator. Learn more via the [NVT Long Term Yield Reporter](#)

Table 3: Greenough low-med rainfall GLY.

Year	2020	2021	2022	2023	2024		
Mean yield (t/ha)		2.53	2.36		2.73		
Pioneer® PY428R	Compromised trial			Compromised trial	112		
InVigor® LR 4540P			111		107		
Nuseed® Hunter TF		107	109		110		
InVigor® R 4520P		108	112		98		
Nuseed® Raptor TF		104	100		104		
Hyola® Regiment XC		99			106		
Pioneer® 44Y27 RR		103	103		100		
Pioneer® PY424GC					98		
Pioneer® PY323G					103		
DG Buller G					97		
Sowing date		12 Jun	21 Apr		12 May	6 May	29 May
Rainfall J–M (mm)		32	53		32	7	25
Rainfall A–O (mm)	233	416	480	227	542		

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

Table 4: Mingenew low-med rainfall GLY.

Year	2020	2021	2022	2023	2024	
Mean yield (t/ha)	2.57	2.47	2.24		2.53	
Nuseed® Hunter TF		108	109	Compromised trial	111	
Nuseed® Emu TF	113		107		104	
InVigor® LR 4540P			108		108	
Pioneer® 44Y27 RR	106	106	107		103	
Pioneer® PY428R					110	
Pioneer® PY424GC					101	
Pioneer® PY323G					104	
Nuseed® Raptor TF	100	103	100		103	
Hyola® Regiment XC		98			105	
InVigor® LR 3540P			104		93	
Sowing date	5 May	5 May	12 May		6 May	1 Jun
Rainfall J–M (mm)	104	58	69		6	31
Rainfall A–O (mm)	203	333	314	219	371	

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

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Table 5: Yuna low-med rainfall GLY.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)		3.71	2.73		3.49
Nuseed® Hunter TF	Trial failed		109	Trial failed	107
InVigor® LR 4540P			109		107
Pioneer® 44Y27 RR		109	103		99
Pioneer® PY424GC					98
Nuseed® Emu TF		111	99		95
InVigor® R 4520P		102	101		101
Hyola® Regiment XC		98			104
Pioneer® PY323G					99
InVigor® LR 3540P			97		92
DG Buller G					98
Sowing date	6 May	5 May	28 Apr	6 May	1 Jun
Rainfall J–M (mm)	37	71	32	22	37
Rainfall A–O (mm)	174	340	270	95	434

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

Table 6: Mingenew low-med rainfall IMI.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)	2.54	2.23	2.08	2.47	
Hyola® Equinox CL			100		No trial
Hyola® Solstice CL		95		120	
Pioneer® 44Y94 CL		105	107	101	
Pioneer® 44Y90 CL	102				
VICTORY® V7002CL	103				
Pioneer® PY327C				102	
Pioneer® PY421C				106	
Pioneer® 43Y92 CL	102	102	101	101	
Hyola® Continuum CL			97	104	
Sowing date	5 May	5 May	12 May	6 May	
Rainfall J–M (mm)	104	58	69	6	
Rainfall A–O (mm)	203	333	314	219	

No 2024 trial cooperator. Learn more via the [NVT Long Term Yield Reporter](#)

Table 7: Carnamah low-med rainfall TT.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)					1.95
HyITec® Trident	No trial	No trial	No trial	No trial	114
HyITec® Velocity					112
HyITec® Trophy					112
Hyola® Blazer TT					110
InVigor® T 4511					108
SF Spark® TT					105
RGT Capacity TT					104
InVigor® LT 4530P					101
Hyola® Defender CT					100
Bandit TT [®]					94
Sowing date					1 Jun
Rainfall J–M (mm)					25
Rainfall A–O (mm)					284

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

Table 8: Coorow low-med rainfall TT.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)		2.93	2.84		
HyITec® Trident	Trial failed	115	110	Compromised trial	No trial
Hyola® Blazer TT			107		
HyITec® Trophy			108		
HyITec® Velocity		111	109		
SF Dynatron TT®		112	106		
InVigor® T 4510		109	106		
InVigor® LT 4530P		109	102		
InVigor® T 4511		106	105		
RGT Baseline® TT			101		
Hyola® Defender CT			101		
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	

No 2024 trial cooperator. Learn more via the [NVT Long Term Yield Reporter](#)

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Table 9: Greenough low-med rainfall TT.

Year	2020	2021	2022	2023	2024	
Mean yield (t/ha)		1.91	2.11		2.48	
Hyola® Blazer TT	Compromised trial	113	117	Compromised trial	110	
HyITec® Trophy						112
HyITec® Trident						111
HyITec® Velocity						110
Hyola® Defender CT			111			100
InVigor® T 4511		104	103			109
InVigor® LT 4530P		111	108			97
RGT Capacity TT		98	102			105
SF Spark® TT		99	97			105
Renegade TT [Ⓛ]		102	105			87
Sowing date	12 Jun	21 Apr	12 May	6 May	29 May	
Rainfall J–M (mm)	32	53	32	7	25	
Rainfall A–O (mm)	233	416	480	227	542	

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

Table 10: Mingenew low-med rainfall TT.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)	2.41	2.02	1.97	2.31	2.34
HyITec® Velocity					113
HyITec® Trident	114				113
HyITec® Trophy					112
InVigor® T 4511		106	105	105	109
SF Spark® TT	107	105	103	103	106
Hyola® Blazer TT	99	103	105	105	109
RGT Capacity TT	103	100	102	108	105
InVigor® LT 4530P	99	106	106	90	98
Bandit TT [Ⓛ]		100	100	94	93
Hyola® Defender CT			98	99	99
Sowing date	5 May	5 May	12 May	6 May	1 Jun
Rainfall J–M (mm)	104	58	69	6	31
Rainfall A–O (mm)	203	333	314	219	371

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

Table 11: Yuna low-med rainfall TT.

Year	2020	2021	2022	2023	2024	
Mean yield (t/ha)		3.07	2.40		3.17	
HyITec® Trident	Trial failed	121	112	Trial failed	106	
HyITec® Velocity			107			103
HyITec® Trophy			110			110
Hyola® Blazer TT			108			111
Nuseed® Griffon TTI						107
InVigor® T 4511		107	107			106
InVigor® LT 4530P		107	105			101
SF Spark® TT		105	104			102
Hyola® Defender CT			101			104
Bandit TT [Ⓛ]		101	95			93
Sowing date	6 May	5 May	28 Apr	6 May	1 Jun	
Rainfall J–M (mm)	37	71	32	22	37	
Rainfall A–O (mm)	174	340	270	95	434	

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

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Australian canola variety disease ratings

The following table contains varietal ratings for blackleg disease of canola.

These ratings are updated twice a year by crop pathologists and were released in autumn 2025.

Table 12: Canola disease guide – autumn 2025 ratings and resistance groups.						
Variety	2025 autumn blackleg rating			2025 upper canopy infection blackleg rating	Type	Major gene resistance group of cultivar
	Bare	Fluopyram (e.g. ILeVo®)	Pydiflumetofen (e.g. Saltro®)			
CONVENTIONAL VARIETIES						
Outlaw [®]	RMR	R	R	MR-UCI	Open pollinated	A
Nuseed [®] Diamond	RMR	R	R	MR-UCI	Hybrid	ABF
Nuseed [®] Quartz	MR			MR-UCI	Hybrid	ABD
TRIAZINE-TOLERANT VARIETIES						
Pioneer [®] PY429T	R		R	R-UCI	Hybrid, Triazine	ABH
HyTtec [®] Trifecta	R			MR-UCI	Hybrid, Triazine	ABD
DG Bidgee TT [®]	R	R	R	R-UCI	Open pollinated, Triazine	H
HyTtec [®] Trident	R			MR-UCI	Hybrid, Triazine	AD
HyTtec [®] Trophy	R	R	R	MR-UCI	Hybrid, Triazine	AD
DG Torrens TT [®]	RMR			R-UCI	Open pollinated, Triazine	H
Monola [®] H524TT	RMR			MR-UCI	High stability oil, hybrid, Triazine	AD
Hyola [®] Blazer TT	RMR		R	MR-UCI	Hybrid, Triazine	ADF
Monola [®] H421TT	RMR			MR-UCI	High stability oil, hybrid, Triazine	BC
InVigor [®] T 4511	RMR	R		MR-UCI	Hybrid, Triazine	Unknown
ATR-Bluefin [®]	RMR			MR-UCI	Open pollinated, Triazine	AB
Renegade TT [®]	MR	R	R	MR-UCI	Open pollinated, Triazine	A
SF Spark [™] TT	MR	R	R	MR-UCI	Hybrid, Triazine	ABDS
HyTtec [®] Velocity	MR			MR-UCI	Hybrid, Triazine	AB
Monola [®] 422TT	MR			MR-UCI	High stability oil, open pollinated, Triazine	BC
DG Avon TT [®]	MR		R	MR-UCI	Open pollinated, Triazine	AC
SF Dynatron [™] TT	MRMS	R	R	MRMS-UCI	Hybrid, Triazine	BC
ATR-Swordfish [®]	MRMS			MRMS-UCI	Open pollinated, Triazine	AB
RGT Baseline [™] TT	MRMS	RMR	R	MRMS-UCI	Hybrid, Triazine	B
Bandit TT [®]	MRMS	RMR	R	MRMS-UCI	Open pollinated, Triazine	A
RGT Capacity [™] TT	MRMS	RMR	R	MRMS-UCI	Hybrid, Triazine	B
ATR-Bonito [®]	MS	MR	RMR	MS-UCI	Open pollinated, Triazine	A
IMIDAZOLINONE-TOLERANT VARIETIES						
Captain CL	R			R-UCI	Winter, hybrid, Clearfield [®]	AH
Hyola [®] Solstice CL	R		R	R-UCI	Hybrid, Clearfield [®]	ADFH
Hyola [®] Feast CL	R		R	R-UCI	Winter, hybrid, Clearfield [®]	H
Phoenix CL	R			MR-UCI	Winter, hybrid, Clearfield [®]	B
Hyola [®] 970CL	R		R	R-UCI	Winter, hybrid, Clearfield [®]	H
RGT Nizza [™] CL	R			MR-UCI	Winter, hybrid, Clearfield [®]	B
Pioneer [®] PN526C	R		R	MR-UCI	High stability oil, hybrid, Clearfield [®]	ABD
Pioneer [®] PY327C	R		R	MR-UCI	Hybrid, Clearfield [®]	AB
RGT Clavier [™] CL	R			R-UCI	Winter, hybrid, Clearfield [®]	ACH
Pioneer [®] 45Y95 CL	RMR			MR-UCI	Hybrid, Clearfield [®]	C
Pioneer [®] PY421C	RMR		R	MR-UCI	Hybrid, Clearfield [®]	A
Nuseed [®] Ceres IMI	RMR			MR-UCI	Hybrid, Imidazolinone	AD
Pioneer [®] 43Y92 CL	RMR	R	R	MR-UCI	Hybrid, Clearfield [®]	B
VICTORY [®] V75-03CL	RMR	R		MR-UCI	High stability oil, hybrid, Clearfield [®]	AB
Pioneer [®] 44Y94 CL	RMR			MR-UCI	Hybrid, Clearfield [®]	BC

Continued on next page

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Table 12: Canola disease guide – autumn 2025 ratings and resistance groups (continued).

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

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

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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	2020	2021	2022	2023	2024	
Mean yield (t/ha)	1.56	1.78	1.59		1.40	
PBA Striker ^{db}	114	104	110	Compromised trial	112	
CBA Captain ^{db}	114	105	108		102	
Neelam ^{db}	111	103	100		110	
PBA Slasher ^{db}	101	100	106		105	
PBA Maiden	95	97	95		103	
Genesis® 836	94	98	86		94	
Genesis® 090	75	91	72		90	
PBA Seamer ^{db}			85			
Sowing date	15 May	27 May	13 Jun		31 May	6 Jun
Rainfall J–M (mm)	104	58	69		26	31
Rainfall A–O (mm)	203	333	314	125	371	

Special thanks to 2024 trial cooperator, IB Thomas & Son.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 2: Mullewa desi chickpea.

Year	2020	2021	2022	2023	2024		
Mean yield (t/ha)	1.20	1.82		0.48			
CBA Captain ^{db}	113	99	Trial results below standard	90	No trial		
Neelam ^{db}	105	102		93			
PBA Striker ^{db}	108	100		89			
PBA Slasher ^{db}	98	99		98			
Genesis® 836	96	96		94			
PBA Maiden	92	95		91			
Genesis® 090	78	93		97			
Sowing date	15 May	26 May		18 May		31 May	
Rainfall J–M (mm)	44	87		58		94	
Rainfall A–O (mm)	220	270		264		107	

No 2024 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

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

Chickpea variety disease ratings – Western Australia

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

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

Table 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>)
DESI				
CBA Captain ^{db}	MS (P)	S		MT
Genesis® 836	S			MII
Kyabra ^{db}	VS	VS		MT
Neelam ^{db}	S			MI
PBA Boundary ^{db}	S	VS		MTMI
PBA Drummond ^{db}	VS	VS		TMT
PBA HatTrick ^{db}	S	S		MT
PBA Maiden	S			MI
PBA Pistol ^{db}	VS			T
PBA Seamer ^{db}	MS	S		MTMI
PBA Slasher ^{db}	S			MI
PBA Striker ^{db}	S			MI
KABULI				
Almaz ^{db}	MS			MI
Genesis® 090	MS			IVI
Genesis® Kalkee	S			VI
PBA Magnus ^{db}	MS			MI
PBA Monarch ^{db}	MS (P)			IVI
PBA Royal ^{db}	MS			MII

* ratings will be updated when available.

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

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant, (P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes,

^ line contains a few susceptible off types, () show outlier.

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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	2020	2021	2022	2023	2024
Mean yield (t/ha)	3.12	2.14	2.89	0.51	1.57
PBA Butler [‡]	108	106	107	104	115
APB Bondi [‡]	109	107	104	105	112
PBA Taylor [‡]	103	104	104	105	103
Kaspa	103	100	102	101	101
PBA Gonyah [‡]	98	100	102	101	99
PBA Wharton [‡]	100	99	97	99	95
PBA Oura [‡]	95	99	100	101	97
PBA Twilight [‡]	97	96	95	95	92
GIA Ourstar ^{‡*}	93	89	88	87	85
GIA Kastar ^{‡*}	104	83	80	77	80
Sowing date	15 May	27 May	13 Jun	31 May	6 Jun
Rainfall J–M (mm)	104	58	69	26	31
Rainfall A–O (mm)	203	333	314	125	371

Special thanks to 2024 trial cooperator, IB Thomas & Son.

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

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

LENTIL

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	2020	2021	2022	2023	2024
Mean yield (t/ha)	1.66	1.57			
GIA Thunder ^{db*}	129	113	Compromised trial	Compromised trial	No trial
GIA Lightning ^{db*}	121	109			
ALB Terrier ^{db*}		108			
PBA Jumbo2 ^d	113	106			
PBA HighlandXT ^{db*}	106	101			
PBA KelpieXT ^{db*}	102	101			
PBA Bolt ^d	102	100			
PBA Hurricane XT ^{db*}	97	100			
PBA Hallmark XT ^{db*}	94	96			
PBA Blitz ^d	92	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	

No 2024 trial cooperator.

* herbicide-tolerant variety.

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

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

LUPIN

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.

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)	1.52	3.49	3.57	1.91	
Rosemont ^{db}			114	106	
Coyote ^{db}	139	106	109	112	
Gidgee ^{db}		109	113	102	
Lawler ^{db}	116	106	108	102	
PBA Jurien ^{db}	121		101	106	
PBA Bateman ^{db}	116	100	96	109	
Mandelup ^{db}	104	102	101	100	
PBA Barlock ^{db}	108	103	95	105	
PBA Gunyidi ^{db}	109	100	96	105	
PBA Leeman ^{db}	83	90	98	96	
Sowing date	6 May	18 May	2 May	24 May	
Rainfall J–M (mm)	114	79	70	18	
Rainfall A–O (mm)	257	477	429	212	

No 2024 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Year	2020	2021	2022	2023	2024
Mean yield (t/ha)	1.31	3.50	2.73	1.95	1.38
Coyote ^{db}	123	109	116	114	112
Rosemont ^{db}			118	109	112
Gidgee ^{db}		103	113	106	109
PBA Jurien ^{db}	112		108	104	104
PBA Bateman ^{db}	113	107	104	106	103
PBA Gunyidi ^{db}	107	104	102	102	101
PBA Barlock ^{db}	106	106	101	100	99
Mandelup ^{db}	102	101	102	100	101
Coromup ^{db}	94	94	92	101	97
PBA Leeman ^{db}	91	93	93	99	98
Sowing date	12 Jun	18 May	5 May	6 May	1 Jun
Rainfall J–M (mm)	87	67	50	6	31
Rainfall A–O (mm)	302	419	362	219	371

Special thanks to 2024 trial cooperator, Altora Ag – Erregulla Plains.
Learn more via the [NVT Long Term Yield Reporter](#)

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

Table 3: Mullewa narrow-leaf lupin.

Year	2020	2021	2022	2023	2024		
Mean yield (t/ha)		2.81	2.92	0.98			
Coyote ^{db}	Trial failed	111	113	104	Trial failed		
Rosemont ^{db}			112	111			
Gidgee ^{db}		102	110	111			
Lawler ^{db}		102	107	107			
PBA Bateman ^{db}		108	102	93			
PBA Jurien ^{db}			102	98			
PBA Gunyidi ^{db}		104	100	94			
Mandelup ^{db}		100	101	101			
Coromup ^{db}		101	99	97			
PBA Leeman ^{db}		98	100	101			
Sowing date		5 May	14 May	10 May		11 May	16 May
Rainfall J–M (mm)		44	87	58		94	49
Rainfall A–O (mm)	220	270	264	107	447		

Special thanks to 2024 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 4: Yuna narrow-leaf lupin.

Year	2020	2021	2022	2023	2024		
Mean yield (t/ha)		2.39	2.82		2.60		
Rosemont ^{db}	Trial failed		107	Trial failed	109		
Coyote ^{db}		108	106		116		
Gidgee ^{db}		112	104		105		
PBA Jurien ^{db}			106		106		
PBA Bateman ^{db}		100	103		110		
PBA Barlock ^{db}		102	104		103		
PBA Gunyidi ^{db}		100	102		105		
Mandelup ^{db}		103	101		100		
Coromup ^{db}		87	94		100		
PBA Leeman ^{db}		89	93		97		
Sowing date		6 May	14 May		28 Apr	11 May	1 Jun
Rainfall J–M (mm)		37	71		32	22	37
Rainfall A–O (mm)	174	340	270	95	434		

Special thanks to 2024 trial cooperator, Helenore Farms.
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 2025.

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

Table 5: Lupin disease guide for Western Australia.

Variety	Anthraxnose resistance	Cucumber mosaic virus (CMV)	Phomopsis pod infection	Phomopsis stem infection	Sclerotinia stem rot

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

NVT tools

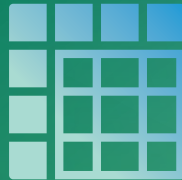
**Trial
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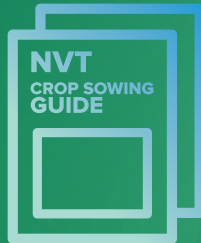
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