



NVT HARVEST REPORT



REVISED MAY 2024



Kwinana East
Western Region



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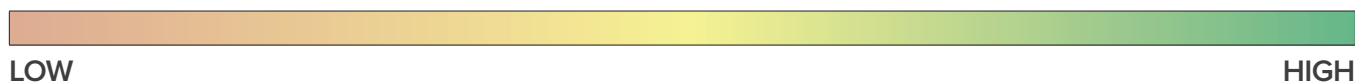
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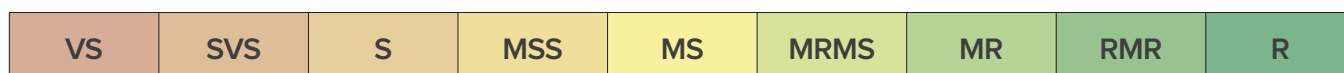
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LEGEND: MEAN VARIETY YIELD PERFORMANCE



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

DISEASE RATING COLOUR RANGE



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

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

Regularly visit nvt.grdc.com.au/nvt-disease-ratings 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 - Kwinana East provides information to support growers and advisers with decisions on variety selection for **Kwinana East**. The information has been generated from the Grains Research and Development Corporation's (GRDC) National Variety Trials (NVT) database. This publication provides a summary of the 2023 and long-term yield performance of varieties of crop species suitable for production in **Kwinana East** together with their quality and disease responses.

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

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

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

Interpreting long-term yield results

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

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

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

In the *NVT Harvest Report - Kwinana East*, results are presented in year groupings for yield for the past five years and quality for the past two years. Further detailed interrogation of the NVT Online results using the Long Term Yield Reporter will provide more specific performance results on all varieties of each crop species in each NVT location throughout **Kwinana East**.

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

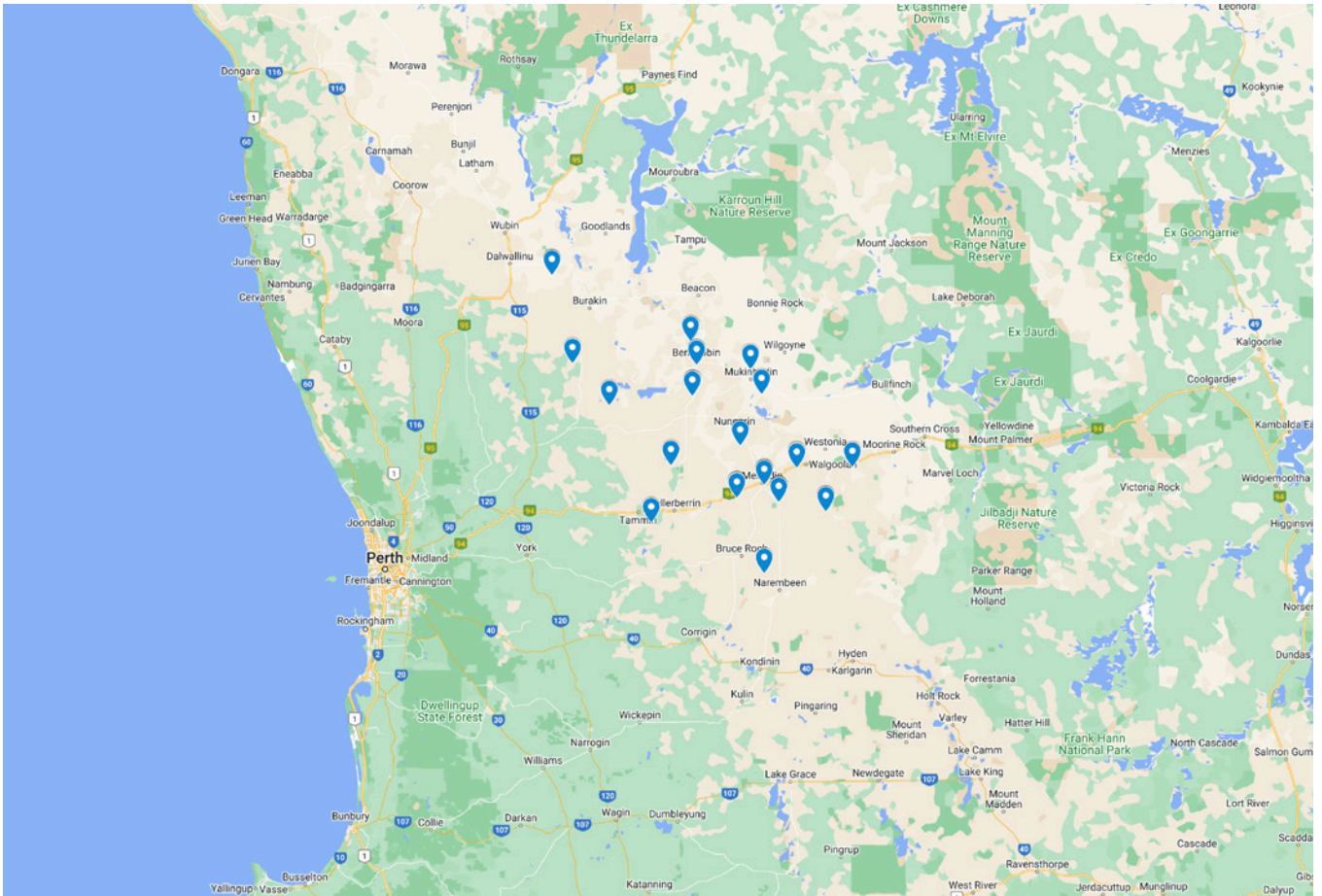
Trials listed as compromised are not suitable for making variety decisions. Results can be found in the [Quarantined trial reports](#).

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

NVT SITE LOCATIONS – Kwinana East

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

SOURCE: NVT Online



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

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	End point royalty* (\$)	Comments supplied by breeding company ¹
Dozer [®] CL Plus	InterGrain	TBC	3.90	Dozer [®] CL Plus is a quick-mid maturing APW Clearfield [®] Plus wheat. Dozer [®] CL Plus pushes mid and quick-mid imidazolinone wheat yields and is an excellent alternative to Chief CL Plus. It is best suited to low-medium rainfall areas in Western Australia and South Australia. Dozer [®] CL Plus has strong lodging resistance, moderate early vigour, medium plant height and medium coleoptile length. Dozer [®] CL Plus offers good grain size and test weight. Proactive disease management of stripe rust and CCN in South Australia is recommended with Dozer [®] CL Plus to maximise yield and quality potential.
Firefly [®]	InterGrain	ANW	4.00	Firefly [®] is a high-yielding, mid-slow maturing ANW wheat, setting a new noodle yield benchmark for WA. Firefly [®] is suited to late April through to early May sowings, being similar in maturity to Zen [®] and Calingiri. Firefly [®] has an effective disease resistance profile, including good stripe rust and yellow spot resistance. Firefly [®] offers good physical grain characteristics, including good grain size.
LRPB Matador [®]	LongReach Plant Breeders	FEED	3.50	Mid-maturity AH wheat that has consistently outperformed Scepter [®] with an improved shorter canopy and better lodging tolerance. Improved powdery mildew (MS) and stripe rust resistance (MS) over Scepter [®] , adding some minor genes for both diseases. AH quality in SA and Victoria and commercialised by Pacific Seeds.
Thumper [®]	InterGrain	AH	3.50	Thumper [®] 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 [®] has a robust disease resistance package with good yellow spot resistance, useful for wheat-on-wheat rotations, and an excellent stripe rust resistance. Thumper [®] offers good grain size, reducing screenings risk, and has adequate test weight. Thumper [®] is currently classified as APW in the western zone with an AH classification expected soon.
Tomahawk CL Plus [®]	Australian Grain Technologies	FEED	4.15	Scepter [®] -type Clearfield [®] variety with increased yield over Scepter [®] . The highest-yielding Clearfield [®] wheat variety in Western Australia, South Australia and Victoria. Tolerant to Clearfield [®] Intervix [®] herbicide. Similar disease resistance profile to Scepter [®] . Similar grain size and test weight as Scepter [®] . Mid-season maturity, similar to Scepter [®] . APW quality classification in SA, Victoria, southern NSW, classification for WA pending.

* 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.

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

Wheat variety yield performance – Kwinana East

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period. The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Bencubbin main season wheat.

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

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

Table 2: Cadoux main season wheat.

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

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

Table 3: Kalannie main season wheat.

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

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

Table 4: Kellerberrin main season wheat.

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

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

WHEAT
BARLEY
OAT
CANOLA
CHICKPEA
FIELD PEA
LUPIN

Table 5: Merredin main season wheat.

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

Special thanks to 2023 trial cooperator.

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

Table 6: Moorine Rock main season wheat.

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

Special thanks to 2023 trial cooperator.

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

Table 7: Mukinbudin main season wheat.

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

Special thanks to 2023 trial cooperator, Kilgobbin Farms.

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

Table 8: Narembeen main season wheat.

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

Special thanks to 2023 trial cooperator.

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

Table 9: Trayning main season wheat.

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

Special thanks to 2023 trial cooperator, Luke Yates.

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

Table 10: Wyalkatchem main season wheat.

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

Special thanks to 2023 trial cooperator, Marcus Reilly.

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

Table 11: Bencubbin early season wheat.

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

Special thanks to 2023 trial cooperator.

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

Table 12: Kalannie early season wheat.

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

Special thanks to 2023 trial cooperator.

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

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

Wheat variety quality – Kwinana East

Grain quality for individual varieties varies from site to site and from year to year. However, long-term and across-site trends highlight varieties that can consistently achieve high protein percentage, high test weight or low grain screenings under a wider range of environments.

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

Protein and yield comparisons

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

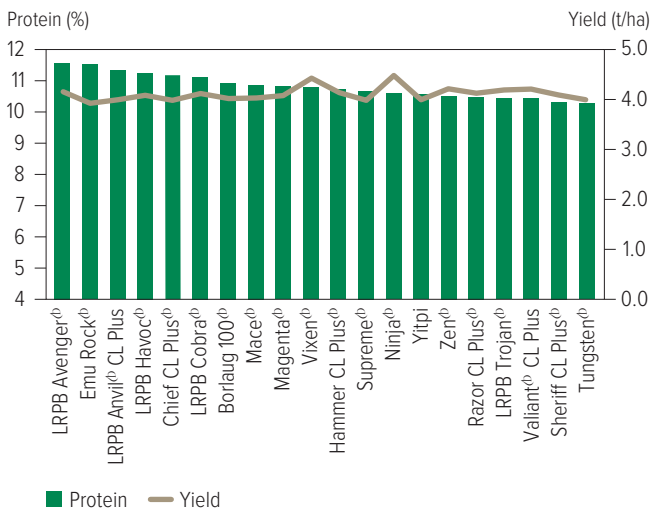


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from eight NVT sites in Kwinana East in 2023.

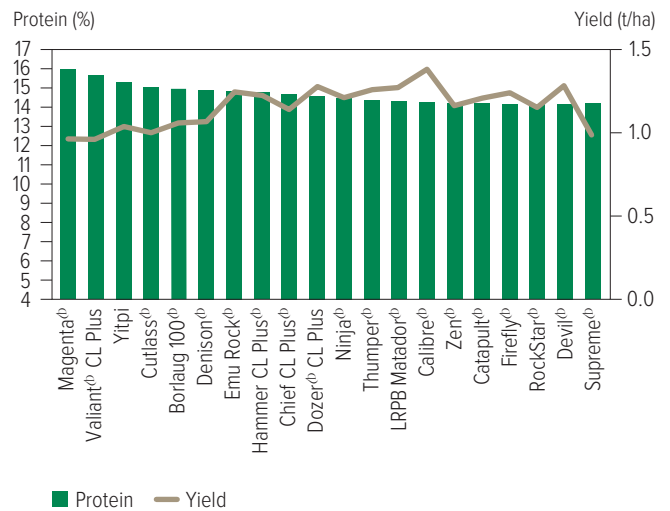


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2022.

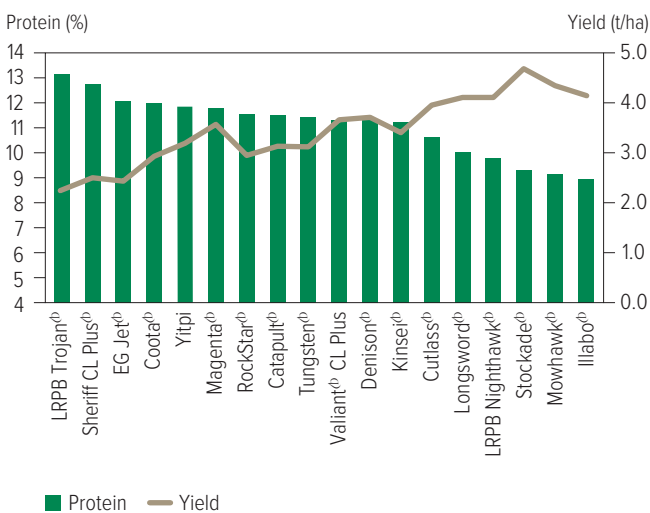
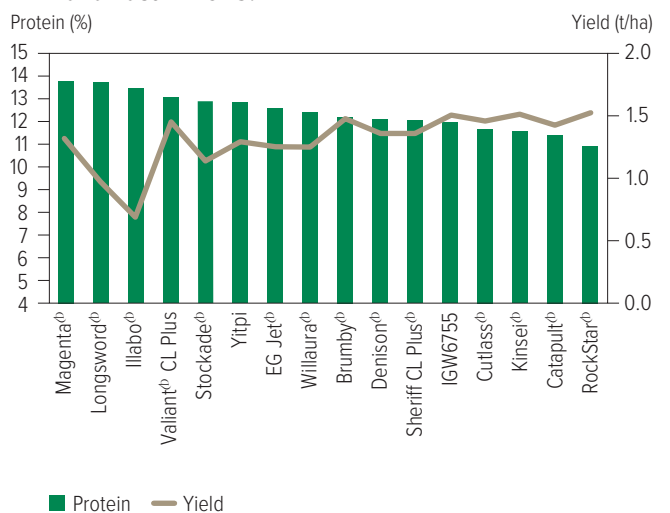


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2023.



WHEAT
BARLEY
OAT
CANOLA
CHICKPEA
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Test weight comparisons

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

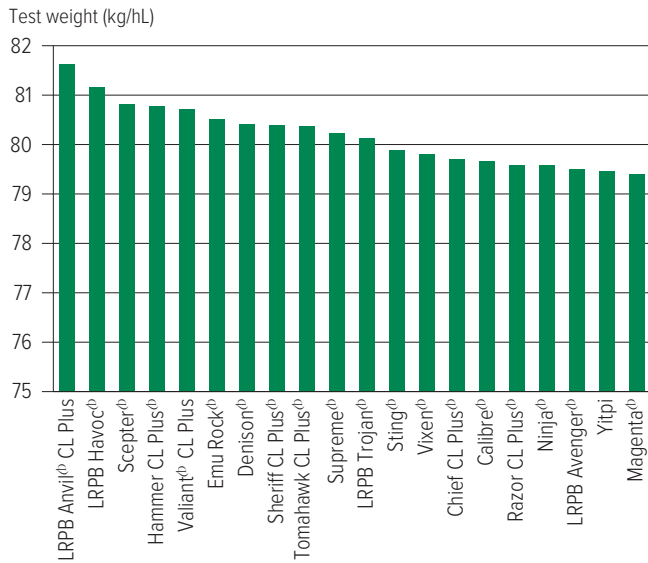


Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from eight NVT sites in Kwinana East in 2023.

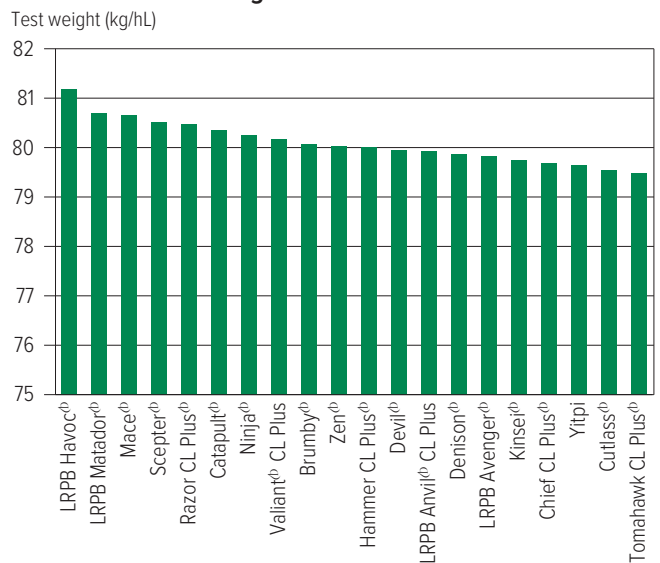


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2022.

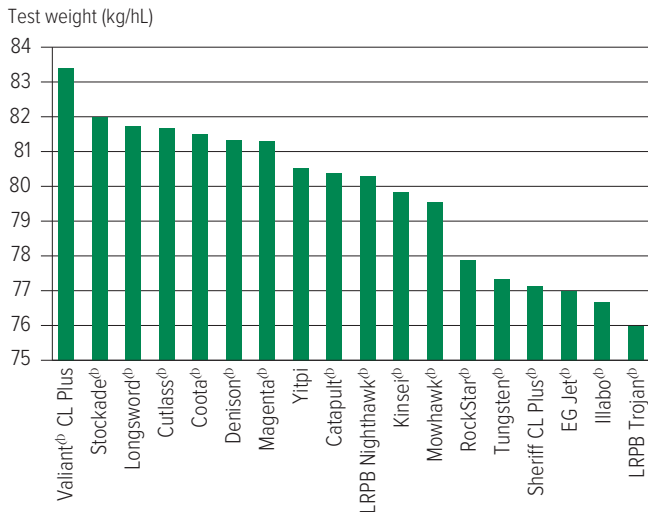
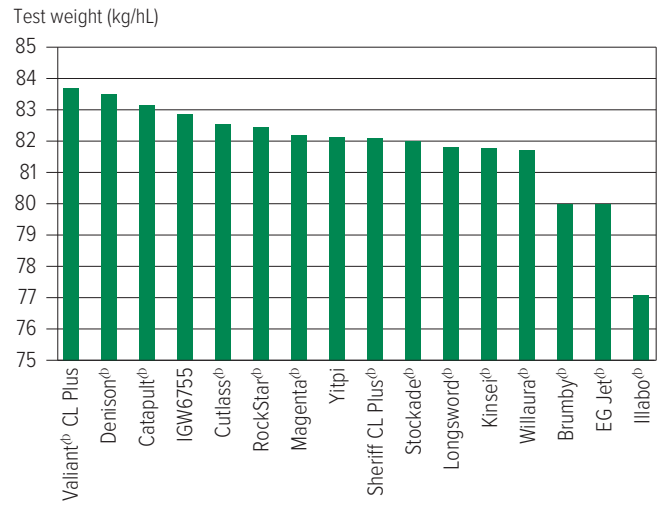


Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2023.



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Screenings comparisons

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

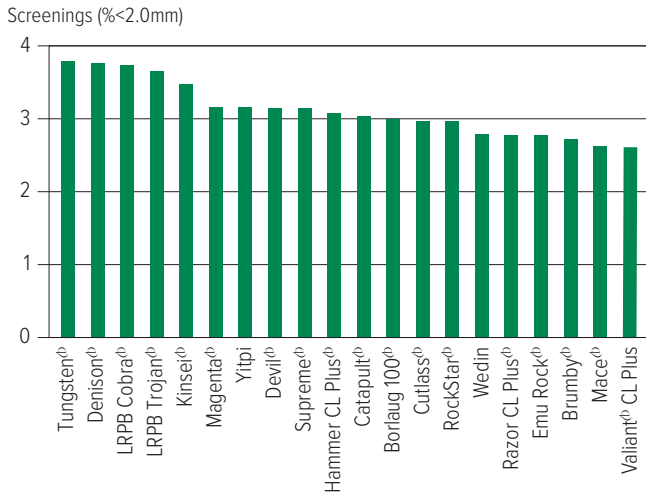


Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from eight NVT sites in Kwinana East in 2023.

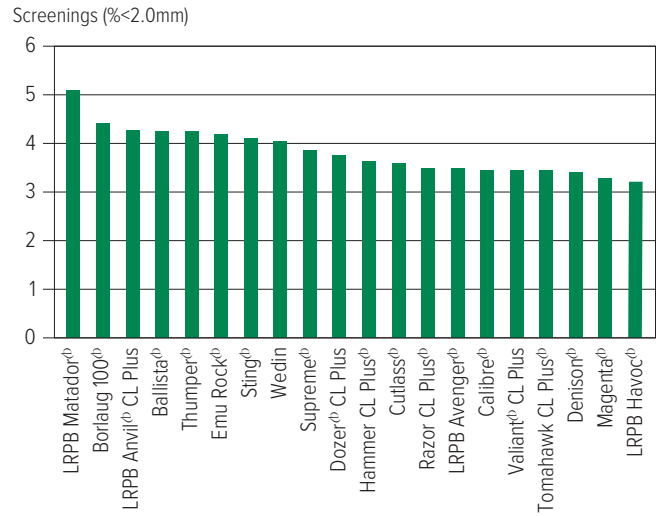


Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2022.

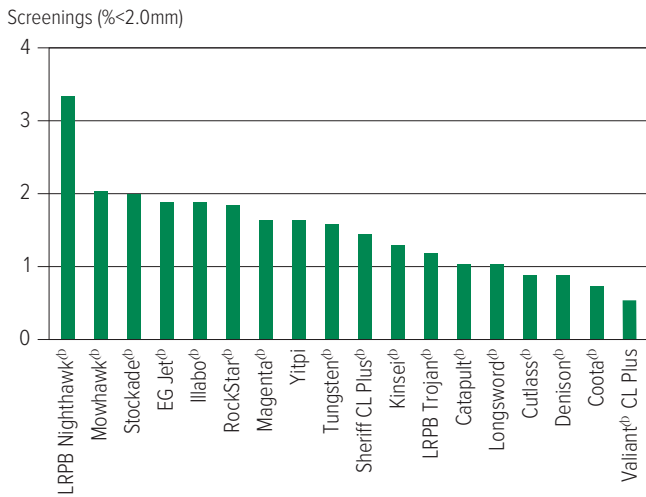
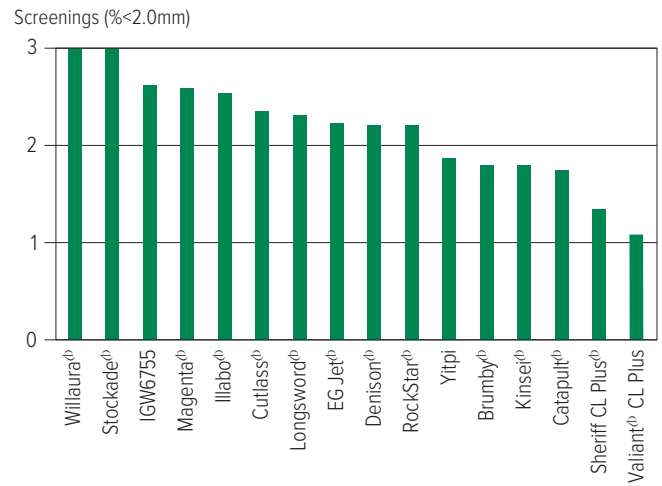


Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from two NVT sites in Kwinana East in 2023.



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Wheat variety disease ratings – Western Australia

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

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

Table 13: Wheat disease guide for Western Australia.

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

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

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

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

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

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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
Neo [®] CL	InterGrain	Under malt evaluation	4.25	Neo [®] CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to medium-high rainfall environments. Neo [®] 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 [®] 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 [®] 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, [®] 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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Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

Barley variety yield performance – Kwinana East

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period. The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Bencubbin main season barley.

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

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

Table 2: Kalannie main season barley.

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

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

Table 3: Kellerberrin main season barley.

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

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

Table 4: Merredin main season barley.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.80	2.27		5.99	1.15
Combat ^{db}	No trial			118	110
Rosalind ^{db}		119	117	106	127
Beast ^{db}		114	115	102	133
Fathom ^{db}		115	105	108	114
Maximus ^{db} CL*		102	121	100	131
Minotaur ^{db}			105	107	105
Compass ^{db}		121	107	97	126
Buff ^{db}		114	100	105	101
La Trobe ^{db}		114	111	97	121
Cyclops ^{db}			107	102	114
Neo ^{db} CL*					96
Spartacus CL ^{db*}		103	116	95	123
Commodus ^{db} CL*			105	97	117
Leabrook ^{db}		107	101	100	112
Spinnaker ^{db}				105	93
Sowing date		7 Jun	13 May	12 May	12 May
Rainfall J–M (mm)	14	100	68	81	42
Rainfall A–O (mm)	208	170	188	319	141

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

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Barley variety quality – Kwinana East

Grain quality for individual varieties varies from site to site and from year to year. However, long-term and across-site trends highlight varieties that can consistently achieve high protein percentage, high test weight or low grain screenings under a wider range of environments.

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

Protein and yield comparisons

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

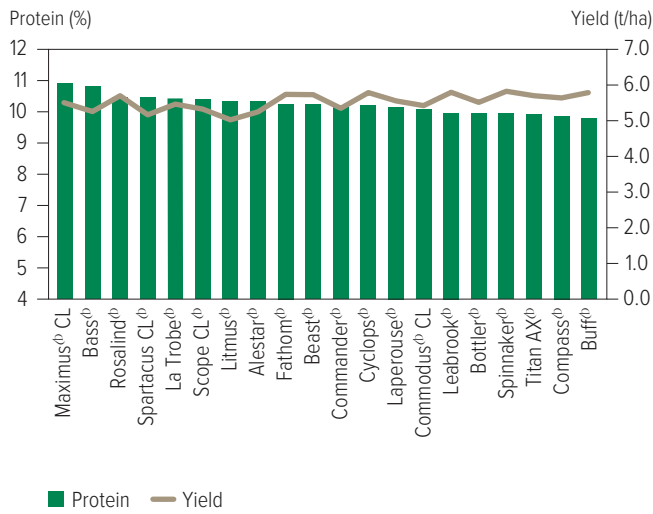
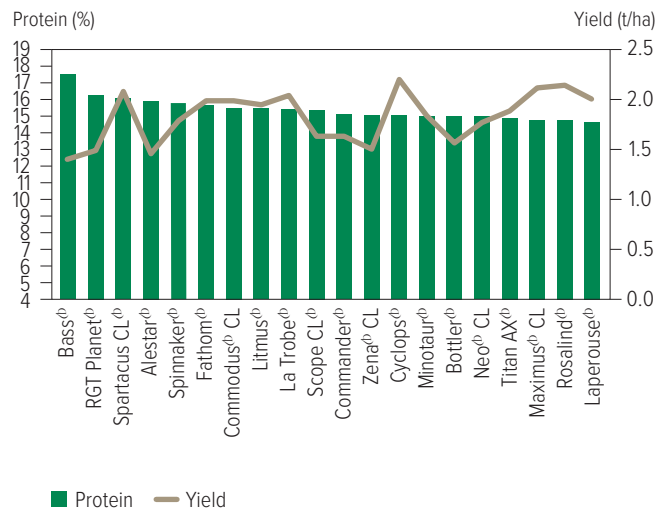


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.



Test weight comparisons

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

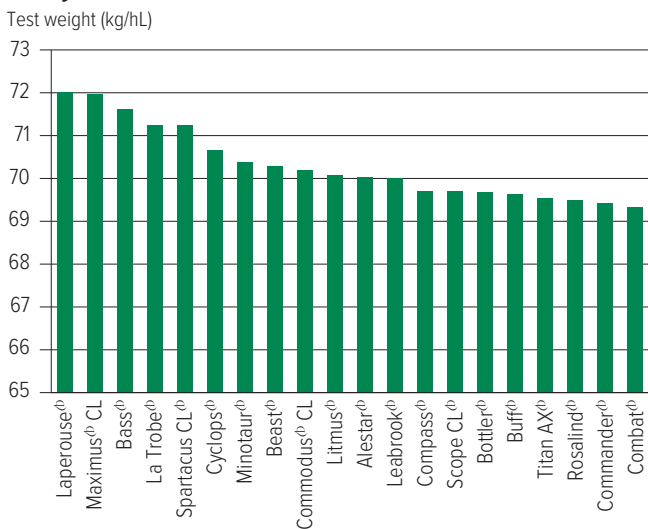
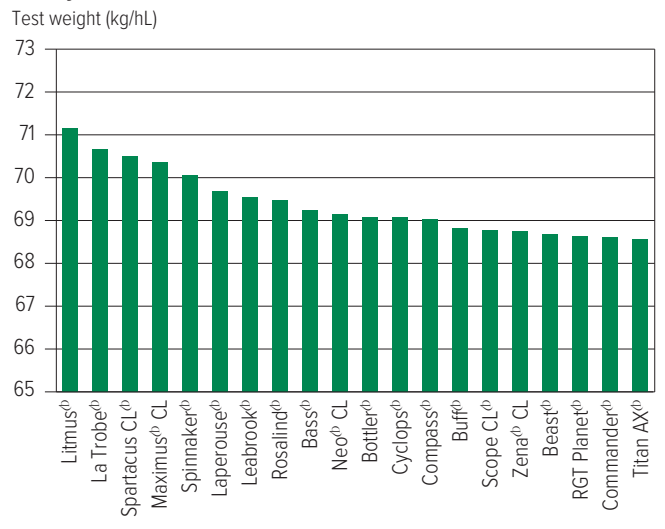


Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.



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Screenings comparisons

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

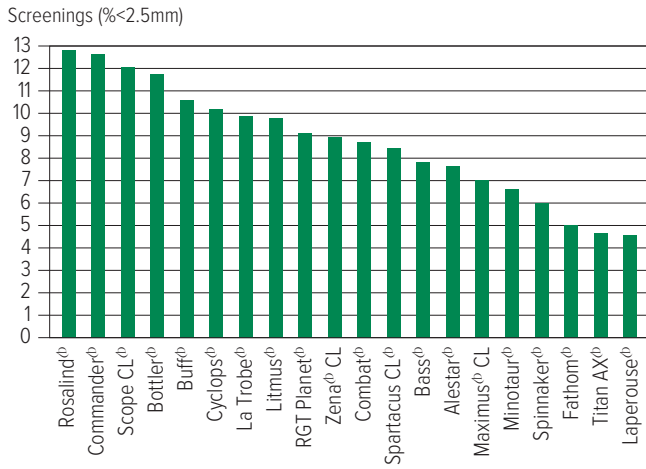
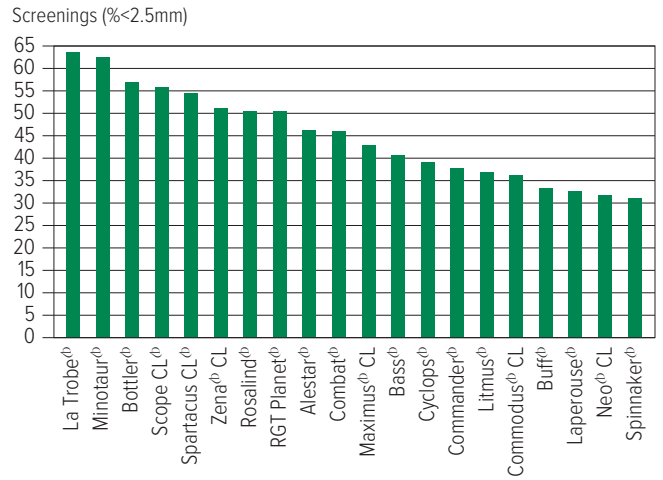


Figure 6: Screenings (<2.5mm) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.



Retention comparisons

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

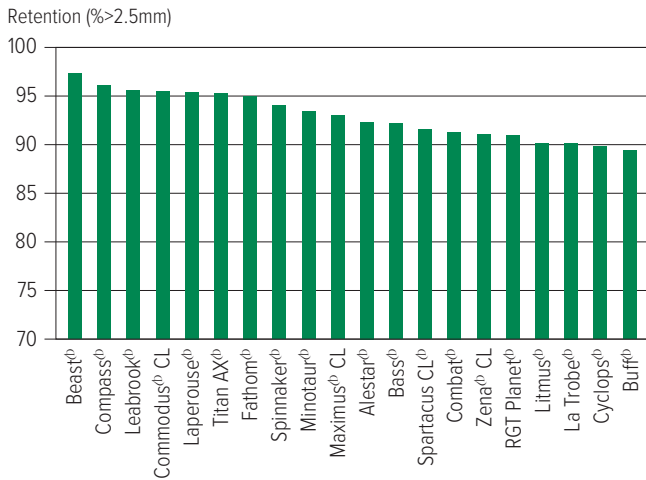
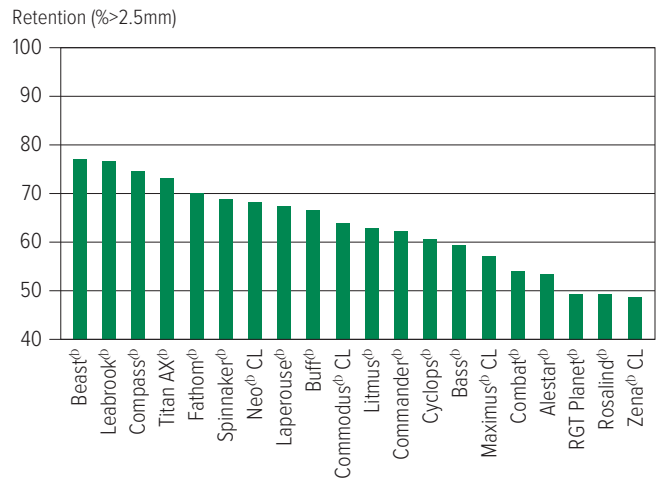


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from two NVT sites in Kwinana East in 2023.



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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 2024.

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

Table 5: Barley disease guide for Western Australia.

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

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

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

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

^a line contains a few susceptible off types.

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New oat varieties

The following information is for oat varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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
Archer [®]	InterGrain	3.65	Archer [®] is a mid-maturing, single-gene imidazolinone-tolerant oat hay variety. Sentry [®] is registered for pre-planting incorporation by seeding (IBS) for hay, forage, seed and grain (domestic feed market only) production for Archer [®] . Excess grain, seed and screenings produced from single-gene imidazolinone oat hay varieties Kingbale [®] and Archer [®] can be used for the domestic oat grain feed markets and/or consumed on-farm. Grain of these varieties cannot be delivered into bulk handling systems.
Kingbale [®]	InterGrain	3.65	Kingbale [®] is a mid-slow maturing, single-gene imidazolinone-tolerant oat hay variety. Sentry [®] is registered for pre-planting incorporation by seeding (IBS) for hay, forage, seed and grain (domestic feed market only) production for Kingbale [®] . Excess grain, seed and screenings produced from Kingbale [®] and Archer [®] can be used for the domestic oat grain feed markets and/or consumed on-farm. Grain of these varieties cannot be delivered into bulk handling systems.
Kultarr [®]	InterGrain	3.00	Kultarr [®] is a quick-mid maturing oat hay suitable for low-medium production areas. Kultarr [®] has a tall plant height and a suitable hay quality profile for export hay.
Wallaby [®]	InterGrain	3.00	Wallaby [®] is a mid-maturing oat hay well suited to medium and high production areas. Wallaby [®] has excellent hay yields.

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

Oat variety yield performance – Kwinana East

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period. The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

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

Special thanks to 2023 trial cooperator.

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

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Oat variety disease ratings – Western Australia

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

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

Table 2: Oat disease guide for Western Australia.

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

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

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

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

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New canola varieties

The following information is for canola varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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 Avon TT [Ⓛ]	Nutrien Ag Solutions Ltd	5.50	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 1.5 to 5.5t/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-MR' due to its distinctive tri-group resistance, ADF.
InVigor® LR 4540P	BASF Australia Ltd	N/A	New LibertyLink® hybrid with tolerance to both Liberty® and TruFlex®. Combines two herbicide tolerances with the flexibility of PodGuard® for shatter tolerance. Early-mid maturing variety suited to low and medium-rainfall zones. Marketed by BASF.
Nuseed® Ceres IMI	Nuseed	N/A	Nuseed® Ceres IMI is Nuseed®'s first release in this popular herbicide technology. It has demonstrated competitive yield and excellent oil during trials, and exhibits strong early vigour and good early biomass. Suited to quick canola growing regions, Nuseed® Ceres IMI comes with good blackleg resistance and harvestability.
PY323G	Pioneer Hi-Bred Aust	N/A	Pioneer® PY323G is an early maturing Optimum GLY® hybrid variety. Suited to early-mid and mid-season growing regions. Mid-fast phenology. Medium height. Blackleg resistance rating NA, resistance group NA. Tested in NVT trials 2023. Marketed by Pioneer Seeds.
PY421C	Pioneer Hi-Bred Aust	N/A	Pioneer® PY421C is an early to mid-maturing hybrid with exceptional yield for maturity and widely adapted. Blackleg rating of 'R-MR', resistance group A. Marketed by Pioneer Seeds.
PY422G	Pioneer Hi-Bred Aust	N/A	Pioneer® PY422G is an early-mid maturing Optimum GLY® hybrid variety. Suited to early-mid and mid-season growing regions. Mid-fast phenology. Medium height. Blackleg resistance rating NA, resistance group NA. Tested in NVT trials 2023. Marketed by Pioneer Seeds.
PY424GC	Pioneer Hi-Bred Aust	N/A	Variety description not supplied.

* 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.

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

Canola variety yield performance – Kwinana East

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period. The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Bencubbin low-med rainfall GLY.

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

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

Table 2: Kellerberrin low-med rainfall GLY.

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

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

Table 3: Merredin low-med rainfall GLY.

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

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

Table 4: Merredin low-med rainfall IMI.

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

Special thanks to 2023 trial cooperator.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties have not been included in this trial, but have been tested in other herbicide trials at this location: Hyola® Battalion XC, Hyola® Defender CT, Hyola® Enforcer CT, Hyola® Garrison XC and Hyola® Regiment XC.
Learn more via the [NVT Long Term Yield Reporter](#)

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Table 5: Bencubbin low-med rainfall TT.

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

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

Table 6: Kellerberrin low-med rainfall TT.

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

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

Table 7: Merredin low-med rainfall TT.

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

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

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Chickpea variety yield performance – Kwinana East

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period. The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Merredin desi chickpea.					
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.91	1.31	0.69	0.66	0.60
CBA Captain [Ⓛ]	111	112	104	108	114
PBA Slasher [Ⓛ]	108	103	99	96	107
PBA Striker [Ⓛ]	108	101	92	94	112
Neelam [Ⓛ]	97	97	97	98	100
PBA Maiden [Ⓛ]	100	95	88	93	102
Genesis™ 836	90	93	98	98	90
PBA Seamer [Ⓛ]				87	
Genesis™ 090	53	69	91	95	
Sowing date	7 Jun	18 May	31 May	25 May	31 May
Rainfall J–M (mm)	14	90	65	65	62
Rainfall A–O (mm)	208	193	251	304	134

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

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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 2: 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	S	MR	MT
Genesis™ 836	S		MR	MII
Kyabra ^{db}	VS	VS	MRMS	MT
Neelam ^{db}	S		MRMS	MI
PBA Boundary ^{db}	S	VS	RMR	MI
PBA Drummond ^{db}	VS	VS	MR	TMT
PBA HatTrick ^{db}	S	S	MRMS	MT
PBA Maiden ^{db}	S		MRMS	MI
PBA Pistol ^{db}	VS		RMR	T
PBA Seamer ^{db}	MS	S	MRMS	MI
PBA Slasher ^{db}	S		MRMS	MI
PBA Striker ^{db}	S		MRMS	MI
KABULI				
Almaz ^{db}	MS		MRMS	MII
Genesis™ 090	MS		MRMS	IVI
Genesis™ Kalkee	S		MRMS	VI
PBA Magnus ^{db}	MS		MR	MII
PBA Monarch ^{db}	MS		MRMS	I
PBA Royal ^{db}	MS		MR	VI

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

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant.

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FIELD PEA

New field pea varieties

The following information is for field pea varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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
APB Bondi [Ⓓ]	Agriculture Victoria	TBC	APB Bondi [Ⓓ] (tested as OZP1903) is a Kaspa-type pea with mid-flowering and mid-maturity. APB Bondi [Ⓓ] 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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Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

Field pea variety yield performance – Kwinana East

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period. The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Merredin field pea.

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

Special thanks to 2023 trial cooperators.

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

Field pea variety disease ratings – Western Australia

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

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

Table 2: Field pea disease guide for Western Australia.

Variety	Bacterial blight	Downy mildew	Powdery mildew	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus thornei</i>)
APB Bondi ^{db}	S	RMR (S)	RMR	RMR	MSS
GIA Kastar ^{db}	S	S	RMR	MR	MS
GIA Ourstar ^{db}	S (P)	S	S	MRMS	MS
Kaspa	S	S	S	RMR	MRMS
PBA Butler ^{db}	MS	S	S	RMR	MRMS
PBA Gunyah ^{db}	S	S	S	RMR	MRMS
PBA Noosa ^{db}	S	MS	S	RMR	MRMS
PBA Oura ^{db}	MS	S	S	MR	MRMS
PBA Pearl	MS	S	S	MR	MRMS
PBA Percy	MRMS	S	S	RMR	RMR
PBA Taylor ^{db}	S	S	S	RMR	MRMS
PBA Twilight ^{db}	S	S	S	MR	MRMS
PBA Wharton ^{db}	S	S	RMR	MR	MRMS
Sturt	MS	S	S	MR	MR

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

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

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FIELD PEA

LUPIN

LUPIN

New lupin varieties

The following information is for lupin varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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
Gidgee [Ⓓ]	Australian Grain Technologies	4.50	A very high and stable yielding alternative to PBA Jurien [Ⓓ] and Mandelup [Ⓓ] . 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 [Ⓓ] . Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly quicker maturity relative to PBA Jurien [Ⓓ] , slightly slower than Mandelup [Ⓓ] .
Rosemont [Ⓓ]	Australian Grain Technologies	4.50	A very high yielding alternative to PBA Jurien [Ⓓ] , Coyote [Ⓓ] and Mandelup [Ⓓ] . 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 [Ⓓ] . Taller plant height, may improve harvestability. Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly slower maturity relative to PBA Jurien [Ⓓ] , slightly quicker than Coyote [Ⓓ] .

* 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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LUPIN

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

Lupin variety yield performance – Kwinana East

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

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

Table 1: Bencubbin narrow-leaf lupin.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		1.34	1.89	2.42			
Coyote ^{db}	No trial	115	113	107	Compromised trial		
Rosemont ^{db}				109			
Lawler ^{db}		106	107	106			
PBA Bateman ^{db}		111	107	103			
PBA Jurien ^{db}		104		106			
Gidgee ^{db}			105	106			
PBA Gunyidi ^{db}		107	103	100			
Mandelup ^{db}		101	101	102			
PBA Barlock ^{db}		101	99	100			
Coromup ^{db}		102	102	97			
Sowing date			8 May	4 May		7 May	31 May
Rainfall J–M (mm)			96	140		102	45
Rainfall A–O (mm)		149	230	284	113		

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

Table 2: Kalannie narrow-leaf lupin.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		1.87	2.09	3.05			
Coyote ^{db}	No trial	128	107	106	Compromised trial		
Rosemont ^{db}				107			
PBA Bateman ^{db}		121	106	102			
Lawler ^{db}		112	104	105			
PBA Jurien ^{db}		109		103			
PBA Gunyidi ^{db}		113	103	100			
Gidgee ^{db}			102	105			
Mandelup ^{db}		102	102	101			
PBA Barlock ^{db}		103	103	98			
Coromup ^{db}		101	94	101			
Sowing date			8 May	4 May		1 May	31 May
Rainfall J–M (mm)			108	131		51	37
Rainfall A–O (mm)		163	271	269	121		

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

Table 3: Merredin narrow-leaf lupin.					
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.27	0.83	0.97	2.45	1.16
Rosemont ^{db}				121	105
Gidgee ^{db}			114	119	102
Coyote ^{db}	121	111	102	113	105
PBA Jurien ^{db}	108	114		109	102
Lawler ^{db}		109	107	113	103
Mandelup ^{db}	102	104	105	104	101
PBA Bateman ^{db}	111	108	100	100	103
PBA Barlock ^{db}	99	106	105	94	99
PBA Gunyidi ^{db}	105	103	96	94	101
PBA Leeman ^{db}	97	85	85	103	100
Sowing date	7 Jun	8 May	8 May	4 May	31 May
Rainfall J–M (mm)	14	79	82	84	51
Rainfall A–O (mm)	208	153	245	320	141

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

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LUPIN

Lupin variety disease ratings – Western Australia

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

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

Table 4: Lupin disease guide for Western Australia.

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

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

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

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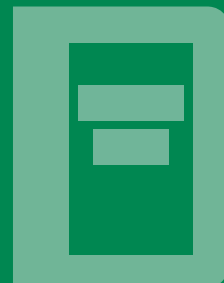
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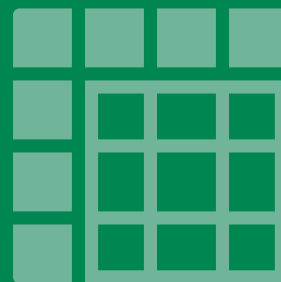
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