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NVT Harvest Report – Mallee South Australia and Victoria

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CONTENTS



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INTRODUCTION	4
WHEAT	6
BARLEY	20
OAT	28
CANOLA	32
CHICKPEA	39
FABA BEAN	41
FIELD PEA	43
LENTIL	46
LUPIN	49
USEFUL NVT TOOLS	52

LEGEND: MEAN VARIETY YIELD PERFORMANCE

LOW HIGH

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

DISEASE RATING COLOUR RANGE

VS	SVS	S	MSS	MS	MRMS	MR	RMR	R
----	-----	---	-----	----	------	----	-----	---

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 nxt.grdc.com.au/resources/crop-sowing-guides



INTRODUCTION

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

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 <u>Long Term Yield Reporter</u>.

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

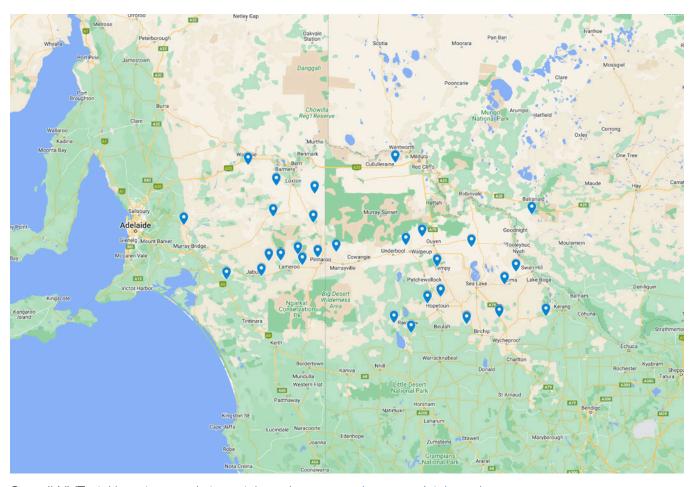
Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides



NVT SITE LOCATIONS – Mallee South Australia and Victoria

Figure 1: Locality of NVT trial sites in Mallee South Australia and Victoria 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	ТВС	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.
Genie [⊕]	InterGrain	АН	3.50	Genie ^(b) is a mid-slow maturing wheat and is an excellent alternative to RockStar ^(b) in greater than three-tonne-per-hectare yield environments. In these environments, the variety offers medium-high rainfall growers a yield improvement compared with RockStar ^(b) . Genie ^(b) , with its slightly later maturity than RockStar ^(b) and long coleoptile, enables earlier sowing opportunities to be maximised. Genie ^(b) has an excellent disease resistance package including useful stem rust and stripe rust resistances. It offers good test weight, moderate grain size and has a medium plant height. Preliminary internal data indicates Genie ^(b) has good sprouting tolerance. Genie ^(b) has an AH classification in the western and southern zones and an AH classification is expected for the south-eastern and northern zones in 2024.
LRPB Major ^{(b}	LongReach Plant Breeders	АН	4.00	Mid-slow maturing spring wheat (similar to Beckom ^(b) and RockStar ^(b)) suitable for early to mid May seeding opportunities throughout southern NSW. Good disease package for southern NSW and Victorian production systems with improved Septoria resistance over its Beckom ^(b) parent. Strong yield performance in both acidic and sodic soil yield trials. AH classification southern NSW, Victoria and South Australia. Marketed by Pacific Seeds.
LRPB Matador ⁽¹⁾	LongReach Plant Breeders	АН	3.50	Mid-maturity AH wheat that has consistently outperformed Scepter ^(b) with an improved shorter canopy and better lodging tolerance. Improved powdery mildew (MS) and stripe rust resistance (MS) over Scepter ^(b) , adding some minor genes for both diseases. AH quality in SA and Victoria and commercialised by Pacific Seeds.
Soaker ⁽¹⁾	LongReach Plant Breeders	APW	3.50	Mid-maturity derived from Scepter ⁽⁾ with agronomy traits being very similar. Addition of one imidazolinone resistance gene so it can be grown as a 'soaker' crop to break the imidazolinone cycle and cover off residual imidazolinone carryover into the wheat year. Quality APW in South Australia and Victoria and available from AG Schilling & Co.
Tomahawk CL Plus ^(b)	Australian Grain Technologies	APW	4.15	Scepter ⁶ -type Clearfield® variety with increased yield over Scepter ⁶ . The highest-yielding Clearfield® wheat variety in Western Australia, South Australia and Victoria. Tolerant to Clearfield® Intervix® herbicide. Similar disease resistance profile to Scepter ⁶ . Similar grain size and test weight as Scepter ⁶ . Mid-season maturity, similar to Scepter ⁶ . APW quality classification in SA, Victoria, southern NSW, classification for WA pending.

^{*} EPR amount is ex-GST, ϕ 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 – Mallee South Australia and Victoria

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: Balranald main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.85	2.31	1.50	4.59	5.08		
RockStar ^(b)	108	108	109	111	108		
Calibre®		109	115	108	107		
Tomahawk CL Plus®*				109	110		
Brumby ^(b)			108	109	108		
Ballista ^(b)	109	108	108	109	105		
LRPB Matador ^(b)				107	105		
Sunblade CL Plus ^{(b*}	103	104	103	109	106		
Cutlass ^(b)	99	101	106	108	107		
Sunmaster ^(b)			96	111	108		
Genie ^(b)					103		
Scepter ^(b)	104	104	103	105	106		
Beckom ^(b)	101	102	100	108	106		
Boree ^(b)		105	105	105	104		
Catapult ^(b)	104	104	106	104	105		
Soaker®					106		
Sowing date	7 May	12 May	25 May	18 May	9 May		
Rainfall J-M (mm)	15	41	53	66	48		
Rainfall A-O (mm)	107	257	161	469	198		

Special thanks to 2023 trial cooperator, Jake Lockhart.

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	3.44	3.59	1.66	2.44	2.81
Calibre ^(b)		114	111	112	115
Tomahawk CL Plus ^{(b*}				107	119
LRPB Matador ^(b)					108
Ballista ^(b)	112	116	107	112	109
Brumby ^{(b}			106	108	112
RockStar ^(b)	118	108	106	112	108
Scepter ^(b)	113	110	104	103	111
Vixen ^(b)	101	125	103	103	103
Sunblade CL Plus ^{(b*}	107	105	103	113	110
Boree ^(b)		109	104	103	104
Soaker ^{(b}					110
Dozer ⁽⁾ CL Plus*			104		101
Catapult ^(b)	115	103	104	101	105
Sunmaster ^(b)			99	113	113
LRPB Major ^(b)					103
Sowing date	22 May	11 May	2 Jun	17 May	10 May
Rainfall J–M (mm)	12	56	57	29	53
Rainfall A–O (mm)	226	224	186	344	252

Special thanks to 2023 trial cooperator, David Slade, Arralka.

Table 2: Birchip main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	4.80	5.36	2.50	4.22	4.66		
Tomahawk CL Plus®*				104	114		
Calibre ^(b)		109	121	105	109		
Ballista ^(b)	115	109	118	109	108		
LRPB Matador ^(b)				99	108		
Vixen ^(b)	118	110	116	101	106		
RockStar ^(b)	112	111	110	103	109		
Brumby ^(b)			108	101	110		
Sunblade CL Plus ^{(b*}	108	105	109	114	107		
Scepter ^(b)	113	106	108	101	108		
Beckom ^(b)	107	102	107	114	107		
Sunmaster ^(b)			101	117	109		
Dozer ^(b) CL Plus*			110		104		
Soaker®					108		
Genie ^(b)					103		
Boree ^(b)		107	107	97	105		
Sowing date	15 May	14 May	10 May	9 May	8 May		
Rainfall J-M (mm)	14	101	25	60	23		
Rainfall A–O (mm)	197	205	172	384	118		

Special thanks to 2023 trial cooperator, Linc Lehmann.

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

Table 4: Hopetoun main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	4.61	4.60	2.91	5.68	4.29		
Tomahawk CL Plus®*				107	109		
Ballista ^(b)	116	109	113	110	108		
Vixen ^(b)	124	109	111	103	110		
Calibre ^(b)		110	116	104	109		
LRPB Matador ^(b)				102	111		
RockStar ^(b)	111	110	111	108	108		
Brumby ^{(b}			109	105	107		
Sunblade CL Plus ^{(b*}	107	105	105	115	102		
Scepter ^(b)	115	106	107	103	106		
Dozer ^(b) CL Plus*			109		108		
Beckom ^(b)	108	103	103	115	99		
Kingston ^(b)	110	107	101	104	108		
Boree ^(b)		107	108	100	107		
Soaker ^(b)					104		
Sunmaster ^(b)			98	122	97		
Sowing date	16 May	13 May	13 May	16 May	15 May		
Rainfall J–M (mm)	16	87	31	43	30		
Rainfall A-O (mm)	152	225	168	360	161		

Special thanks to 2023 trial cooperator, Devon Mill.



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

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 5: Manangatang main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		2.61	2.41	5.14	2.55		
Calibre ^(b)		113	125	104	117		
Tomahawk CL Plus ^{(1)*}				107	115		
Ballista ^(b)		109	117	108	111		
LRPB Matador ^(b)				102	115		
Vixen ^(b)		112	111	105	108		
RockStar ^(b)	<u>lal</u>	107	110	105	113		
Brumby ^{(b}	ed tr		109	104	113		
Sunblade CL Plus®*	Compromised trial	101	107	111	104		
Scepter ^(b)	mpro	108	107	103	109		
Dozer ^(b) CL Plus*	의		110		109		
Beckom ^(b)		100	104	111	101		
Boree ^(b)		108	107	100	110		
Genie ^(b)					101		
Reilly ^(b)		102	113	104	99		
Soaker ^(h)					107		
Sowing date	8 May	12 May	25 May	17 May	8 May		
Rainfall J-M (mm)	18	48	48	41	25		
Rainfall A-O (mm)	133	227	150	462	144		

 $^{^{\}ast}$ herbicide-tolerant variety. Learn more via the $\underline{\text{NVT Long Term Yield Reporter}}$

Table 7: Nangari	Table 7: Nangari main season wheat.							
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.53	3.12	1.30	4.11	2.42			
Calibre®		111	109	105	118			
Tomahawk CL Plus®*				104	124			
Ballista ^(b)	122	109	105	110	110			
LRPB Matador ^(b)					111			
Vixen th	131	109	106	107	109			
RockStar ^(b)	105	111	105	109	104			
Brumby ^(b)			106	105	110			
Dozer ⁽⁾ CL Plus*			104		102			
Sunblade CL Plus ^{(b*}	102	102	101	110	107			
Scepter ^(b)	102	105	106	102	113			
Boree ^(h)		108	105	103	104			
Soaker®					111			
Genie ^(b)					94			
Reilly ^(b)				105	102			
Razor CL Plus®*	113	100	104	97	115			
Sowing date	10 May	5 May	28 May	7 May	29 May			
Rainfall J-M (mm)	5	55	41	34	37			
Rainfall A-O (mm)	31	212	139	386	120			

Table 6: Merrinee main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		2.35	1.51	3.30	4.45		
Calibre ^(b)		107	119	113	111		
RockStar ^(b)		106	110	113	112		
Brumby ^{(b}			109	110	112		
LRPB Matador ^(b)				109	109		
Tomahawk CL Plus®*				106	111		
Ballista ^(b)		105	112	110	107		
Catapult ^(b)	.	104	106	106	109		
Boree ^(b)	Trial failed	105	108	107	107		
Dozer ^(b) CL Plus*	laliea		109		105		
Scepter ^(b)		104	106	104	108		
LRPB Major ^(h)					106		
Cutlass ^(b)		100	98	107	107		
Sunblade CL Plus ^{(b*}		102	102	106	105		
Soaker®					107		
LRPB Trojan ^{(b}		102	97	104	107		
Sowing date	6 May	12 May	25 May	10 May	9 May		
Rainfall J-M (mm)	4	49	55	86	19		
Rainfall A-O (mm)	49	235	128	317	148		

Special thanks to 2023 trial cooperator, Matt Curtis.

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

Table 8: Palmer main season wheat.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.93	2.23	2.12	2.87	2.69			
Calibre ^(b)		118	114	114	106			
Tomahawk CL Plus®*				102	120			
LRPB Matador ^(b)					108			
Ballista ^(b)	109	111	111	114	105			
Vixen ^(b)	104	103	111	111	113			
Brumby ^{(b}			103	105	107			
Scepter ^(b)	113	110	104	101	111			
RockStar ^(b)	108	110	104	111	102			
Dozer ^(h) CL Plus*			108		102			
Boree ^(b)		105	105	107	104			
Razor CL Plus®*	109	104	107	98	111			
Sunblade CL Plus ^{(b*}	105	111	101	104	104			
Soaker®					111			
Reilly ^(b)				111	96			
LRPB Anvil® CL Plus*			108	92	112			
Sowing date	14 May	4 May	8 Jun	9 May	16 May			
Rainfall J-M (mm)	6	32	51	55	42			
Rainfall A-O (mm)	121	222	285	316	175			



Special thanks to 2023 trial cooperator, Clinton Scholz.

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

Special thanks to 2023 trial cooperator, Steen Paech, Hillydale.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 9: Pinnaroo main season wheat.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	2.18	4.21	0.88	3.78	2.56			
Calibre ^(b)		113	123	109	120			
Tomahawk CL Plus ^{(b*}				109	123			
Ballista ^(b)	108	112	124	114	110			
LRPB Matador ^(b)					112			
RockStar ^(b)	113	112	113	106	105			
Vixen [®]	97	109	129	112	109			
Brumby ^(b)			112	103	111			
Sunblade CL Plus ^{(b)*}	104	107	113	113	106			
Scepter ^(b)	105	107	114	103	113			
Dozer CL Plus*			115		103			
Soaker ^(b)					110			
Boree ^(b)		108	110	101	106			
Sunmaster®			106	112	103			
Genie ^(b)					94			
Reilly®				111	102			
Sowing date	13 May	5 May	2 Jun	10 May	31 May			
Rainfall J–M (mm)	8	85	32	61	25			
Rainfall A–O (mm)	157	236	184	363	218			
pecial thanks to 2023 trial cooperator, Danyon Hawthorne, Pine Park.								

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

V	0000	0000			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		2.27	1.46	5.45	2.55
Ballista ^(b)		112	115	111	113
Genie ^(b)					105
Sunblade CL Plus ^{(b*}		105	108	114	107
Calibre ^(b)		114	122	101	116
Vixen ^(b)		115	104	108	110
RockStar ^(b)	<u></u>	107	112	107	112
Beckom ^(b)	ed tr	105	104	113	104
LRPB Scout ^(b)	simis	100	112	113	103
LRPB Matador ^(b)	Compromised trial			102	113
Sunmaster ^(b)	3		98	117	101
Tomahawk CL Plus®*]			101	113
Reilly ^(b)	1	103	112	110	104
Dozer ⁽⁾ CL Plus*	1		108		109
Brumby ^(b)	1		109	101	111
Ascot ^(b)	1	99	99	111	100
Sowing date	8 May	11 May	11 May	11 May	11 May
Rainfall J–M (mm)	18	47	29	63	34
Rainfall A–O (mm)	161	233	199	453	209

Table 10: Quaml	Table 10: Quambatook main season wheat.										
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	2.63	3.12	3.84	4.63	5.52						
Vixen ^(b)	123	116	121	98	110						
Ballista ^(b)	115	112	114	109	108						
Tomahawk CL Plus ^{(h*}				100	111						
LRPB Matador ^(b)				98	111						
Calibre ^(b)		113	113	104	109						
RockStar ^(b)	107	109	108	107	111						
Dozer [⊕] CL Plus*			111		108						
Sunblade CL Plus ^{(b*}	107	104	105	115	104						
Brumby ^(b)			107	102	110						
Genie ^(b)					103						
Beckom ^(b)	106	102	104	115	102						
Scepter ^(b)	106	107	109	99	107						
Kingston ^(b)	109	105	107	95	111						
Boree ^(b)		108	108	97	108						
Sunmaster ^(b)			100	120	102						
Sowing date	15 May	13 May	6 May	17 May	8 May						
Rainfall J–M (mm)	34	77	57	82	62						
Rainfall A–O (mm)	176	222	171	404	210						

Special thanks to 2023 trial cooperator, Ash Marshall.

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

Table 12: Walper	up main	season v	wheat.			
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	2.43	4.15	2.36	4.22	4.87	
Tomahawk CL Plus®*				107	112	
Calibre ^(b)		108	115	108	103	
Ballista ^(b)	115	107	112	111	104	
Vixen ^(b)	120	107	111	105	105	
LRPB Matador ^(b)				104	103	
Sunblade CL Plus ^{(b*}	105	104	106	113	108	
Beckom ^(b)	103	103	104	113	110	
Brumby ^{(b}			111	104	106	
RockStar ^(b)	110	108	111	106	104	
Sunmaster ^(b)			101	114	114	
Scepter ^(b)	112	106	109	103	107	
Soaker®					108	
Dozer ^(h) CL Plus*			108		100	
Genie ^(b)					103	
Boree ^(b)		106	108	100	101	
Sowing date	7 May	11 May	25 May	14 May	11 May	
Rainfall J-M (mm)	9	85	54	86	55	
Rainfall A-O (mm)	118	247	189	444	228	



Special thanks to 2023 trial cooperator, Warrick Grey.

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

Special thanks to 2023 trial cooperator, Mick Pole.

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

Table 13: Wanbi main season wheat. Year 2019 2020 2021 2022 2023												
Year	2019	2020	2021	2022	2023							
Mean yield (t/ha)	0.45	2.87			2.43							
Calibre ^(b)		111			116							
Brumby ^(b)					112							
Tomahawk CL Plus ^{(b*}	-(t)*											
RockStar ^(b)	102	110	0									
Ballista ^{(b}	93	107			111							
LRPB Matador [©]			lej l		113							
Cutlass ^(b)	130	109		ed tr	99							
Scepter ^(b)	73	107	Trial failed	Simis	111							
Sunblade CL Plus ^{(b*}	105	106	lalleu	Compromised trial	106							
Catapult ^(b)	90	107]	8	107							
LRPB Major®]		103							
Boree ^(b)		105			108							
Soaker ^{(b}					108							
Sunmaster ^(b)					102							
Dozer ^(b) CL Plus*					107							
Sowing date	22 May	5 May	25 May	16 May	30 May							
Rainfall J–M (mm)	7	110	19	47	21							
Rainfall A–O (mm)	111	237	139	332	159							

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 15: Birchip	early se	eason w	neat.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	4.60	5.30	3.76	4.46	5.81
Genie ^(b)					109
IGW6755					103
LRPB Major ^(b)					108
RockStar ^(b)	107	109	117	104	105
LRPB Beaufort®	101	106	105	115	107
Denison ^(b)		109	106	97	109
Catapult ^{(b}	98	110	111	92	106
Cutlass ^(b)		104	105	101	103
Coota ^(b)		101	104	92	104
DS Pascal [®]	109	94	102	104	94
Brumby ^(b)					105
Sheriff CL Plus ^{(b*}	103	100	106	89	97
Illabor	98	95	90	108	97
LRPB Nighthawk ^(b)	97	100	95	101	94
EG Titanium	103	92	96	98	98
Sowing date	16 Apr	16 Apr	19 Apr	18 Apr	19 Apr
Rainfall J-M (mm)	14	101	25	60	23
Rainfall A-O (mm)	197	205	172	384	118
Irrigation A-O (mm)	16		15		

Special thanks to 2023 trial cooperator, Linc Lehmann.

Table 14: Wunkar main season wheat.											
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	0.45	2.28		3.31	1.67						
Calibre ^(b)		112		103	125						
RockStar ^(b)	113	109		108	110						
Ballista ^(b)	124	108		103	114						
Brumby ^(b)				104	113						
Cutlass ^(b)	84	104		115	100						
LRPB Matador ^(b)					115						
LRPB Major ^(h)					105						
Tomahawk CL Plus ^{(b*}			Trial failed	96	122						
Sunblade CL Plus ^{(b*}	104	104	lalled	107	106						
Genie ^(b)					97						
Catapult ^(b)	107	105		102	108						
Dozer ^(h) CL Plus*					107						
Boree ^(b)		105		100	108						
Scepter ^(b)	113	104		98	113						
LRPB Scout ^(b)	111	103		104	101						
Sowing date	12 Jun	6 May	28 May	26 May	30 May						
Rainfall J-M (mm)	2	70	22	51	31						
Rainfall A-O (mm)	81	187	137	409	119						

Special thanks to 2023 trial cooperator, David Gibbs.

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

Table 16: Pinnaroo early season wheat.										
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)		3.72		2.92	4.27					
IGW6755					95					
DS Bennett ^(b)		122		115	89					
Valiant [⊕] CL Plus*				109	103					
RockStar ^(b)		118		111	90					
Denison ^(b)		113		98	103					
Illabo ^(b)	<u>ia</u>	96		104	110					
Cutlass ^(b)	ed tr	108		102	99					
Catapult ^{(b}	Compromised trial	113	Trial failed	92	95					
Longsword ^(b)		92	lalled	83	119					
EG Titanium		86		108	99					
LRPB Nighthawk ^(b)		99		88	101					
DS Pascal ^(b)		92		111	91					
Brumby ^(b)					97					
Yitpi		84		103	98					
LRPB Major ^(b)					94					
Sowing date	11 Apr	15 Apr	19 Apr	19 Apr	13 Apr					
Rainfall J-M (mm)	8	85	32	61	25					
Rainfall A–O (mm)	157	236	184	363	218					
Irrigation A–O (mm)	15	15		10						

Special thanks to 2023 trial cooperator, Skeet Lawson.



^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Wheat variety quality - Mallee South Australia and Victoria

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 Mallee South Australia and Victoria 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 13 NVT sites in Mallee SA-Victoria in 2022.

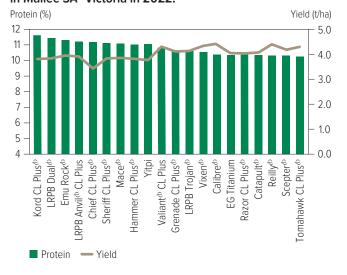


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from 14 NVT sites in Mallee SA–Victoria in 2023.

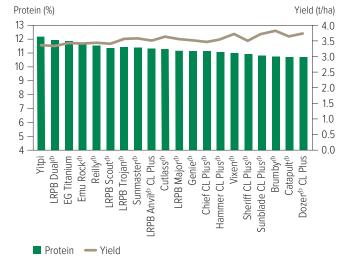


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Mallee SA–Victoria in 2022.

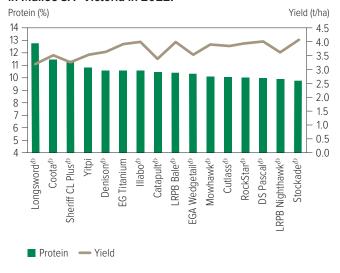
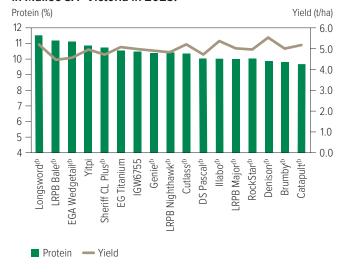


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from two NVT sites in Mallee SA–Victoria in 2023.





CHICKPEA

Test weight comparisons

Figure 5: Test weight (kg/hL) comparisons for main season wheat varieties from 13 NVT sites in Mallee SA–Victoria in 2022.

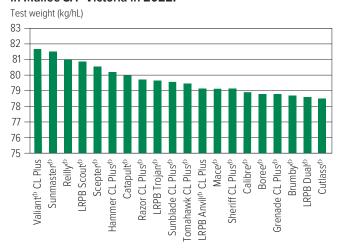


Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from 14 NVT sites in Mallee SA–Victoria in 2023.

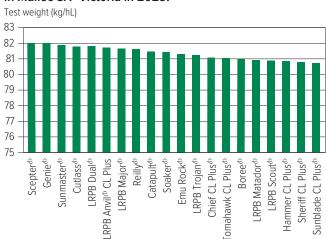


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Mallee SA-Victoria in 2022.

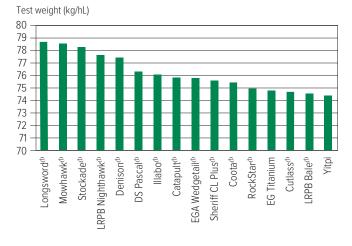
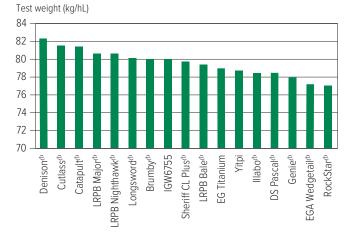


Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from two NVT sites in Mallee SA–Victoria in 2023.





Screenings comparisons

Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from 13 NVT sites in Mallee SA–Victoria in 2022.

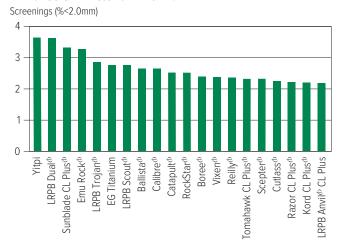


Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from 14 NVT sites in Mallee SA–Victoria in 2023.

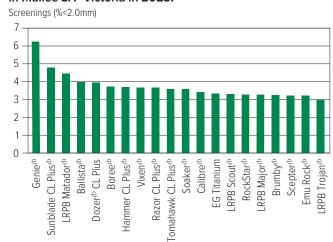


Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from two NVT sites in Mallee SA–Victoria in 2022.

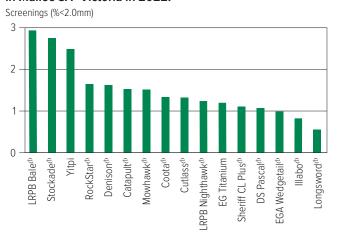
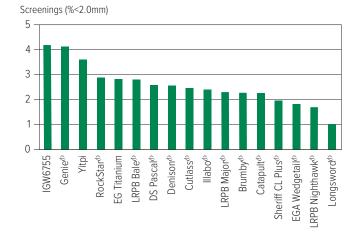


Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from two NVT sites in Mallee SA–Victoria in 2023.





order and disease ratings are colour-coded to match resistance and tolerance ratings.

T-1-1- 47. Wh 1			. C 1 - A	and and the								
Table 17: Wheat	disease	guide for	South A	ustralia.								
Variety	Stem rust	Stripe rust (east coast resistance)	Leaf rust	Septoria tritici blotch	Yellow leaf spot	Powdery mildew	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	CCN	Eyespot	Crown rot	Black point
Anapurna	MSS	RMR	MS	MRMS	MRMS	RMR	MS	S (P)	MRMS		SVS	MSS
Ascot ^(b)	MRMS	MSS	RMR	S	MRMS	S	S	S	MR	S	S	S
Ballista ^(b)	MR	MSS	S	SVS	MS	SVS	S	MRMS	MRMS	S	S	MS
Beckom ^(b)	MRMS	MRMS	MSS	S	MSS	MSS	S	MSS	R		S	MRMS
BigRed ^(b)	S	RMR	MRMS	MR	MR	RMR	MS	MS	S		MSS	MR
Boree ^(b)	MR	SVS	S	SVS	MRMS	SVS	S	MSS	MSS		S	S
Borlaug 100 th	MR	SVS	MR	MSS	MRMS	S	S	MS	MS	MSS (P)	MSS	MSS
Brumby ^(b)	MR	MS	SVS	S	MRMS	MR/S	MRMS	MS (P)	MRMS	S	S	MSS
Calibre ^(b)	MR	S	S	S	MRMS	MSS	S	MSS	MRMS	S	S	MSS
Catapult ^(b)	MR	S	S	MSS	MRMS	S	S	MS	R	S	MSS	S
Chief CL Plus ^(b)	MR	SVS	MR	S	MRMS	SVS	MRMS	MSS	MS	MSS	MSS	MS
Coolah ^(b)	MR	MSS	RMR	MSS	MSS	S	S	MS	S		MSS	S
Coota ^(b)	RMR	S	MR	S	MSS	S	MR	MS	MR	S	MSS	MS
Cosmick®	MS	MSS	SVS	SVS	MRMS	MSS	MSS	MSS	S		S	MRMS
Cutlass ^(b)	R	MSS	RMR	MSS	MSS	MSS	MSS	MSS	MR		S	MS
Denison ^(b)	MS	S	S	MSS	MRMS	S	S	S	MS	S	MSS	MS
Devil ^(b)	S	SVS	SVS	SVS	MRMS	S	MSS	S	MSS	S	MSS	MSS
Dozer [⊕] CL Plus	MS	S	MSS	S (P)	MS	S	MRMS	S	MS (P)	SVS (P)	S	MRMS (P)
DS Bennett ^(b)	MS	S	SVS	MSS	MRMS	R	S	S	S		VS	MSS
DS Pascal ^(b)	MSS	MRMS	MRMS#	MSS	MS	RMR	S	S	S		S	MS
EG Jet ^(b)	S	MRMS	S	MSS	MRMS	SVS	S	S	MRMS		S	MS
EG Titanium	MS	MR	MS	MSS	MSS	S	MSS	MSS	R	S	MSS	MSS
EGA Wedgetail ⁽¹⁾	MRMS	MS	MSS	MSS	MSS	MSS	S	VS	S		S	MS
Einstein	S	RMR	S	MSS	MR		MRMS	S	S		S (P)	R
Emu Rock ^(b)	MS	SVS	SVS	S	MS	MSS	MSS	S	S		MSS	MSS
Genie ^(b)	MS (P)	MRMS (P)	S (P)	S (P)	MRMS (P)	SVS (P)						
Hammer CL Plus ^(b)	MR	MS	S	MSS	MRMS	S	MSS	S	MRMS	S	MSS	MRMS
Hyperno ^(b)	RMR	MR	RMR	MSS	MRMS	MS	MS	RMR	MS		SVS	MS
IGW6755	MRMS	MSS	MS	MSS	MRMS	S	MSS	MR	MSS	MSS (P)	S	MR
Illaborb	MRMS	MRMS	S	MSS	MS	R	MSS	MSS	MRMS	S	S	MRMS
Jillaroo ^{(b}	MS	MSS	S	S	MS	SVS	S	MS (P)	MS	S	S	MS
Kingston ^(b)	S	MSS	S	S	MSS	S	S	MRMS	R	S	S	MSS
Longford	RMR	RMR	RMR	MRMS/S	MRMS	RMR	S	S	MS	MSS (P)	MSS	MRMS
Longsword ^(b)	MR	MRMS/MS	MS	MS	MRMS	S	MRMS	MRMS	MRMS	S	MSS	MS
LRPB Anvil® CL Plus	MR	S	SVS	VS	MSS	SVS	MSS	S	MS	S	MSS	S
LRPB Avenger ^(b)	MS	S	S	S	MS	SVS	MSS	MRMS	MRMS	S	S	MRMS
LRPB Bale®	MRMS	MRMS	MSS	MSS	SVS	MS	S	S	R	S	S	MS

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WHEAT

BAR

. A

CANO

FABA BEAN

HELD PEA

LENIL

LUPIN

LRPB Beaufort®

LRPB Dual®

LRPB Havoc

LRPB Impala®

LRPB Majord

LRPB Oryx®

LRPB Raider®

LRPB Scotch®

LRPB Scout®

LRPB Trojan®

Mace[®]

Manning^(b)

Naparoo^(b)

Reilly[®]

Razor CL Plus®

RGT Accroc®

RGT Calabro

RGT Cesario®

RGT Waugh®

RGT Zanzibar

RockStar®

Saintly®

Scepter^(b)

Severn[®]

Soaker^(b)

Sting®

Stockade[®]

Sunflex^(b)

Sunmaster^(b)

Sunprime[®]

Vixen[®]

Yitpi

Zen®

Willaura^(b)

Sheriff CL Plus®

SQP Revenue®

Sunblade CL Plus®

Tomahawk CL Plus®

Valiant (b) CL Plus

LRPB Kittyhawk^(b)

LRPB Matador®

LRPB Nighthawk^(b)

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

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RLN resistance (Pratylenchus thornei)

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Table 17: Whea	at disease	guide for	South A	ustralia (continue	ed).						
Variety	Stem rust	Stripe rust (east coast resistance)	Leaf rust	Septoria tritici blotch	Yellow leaf spot	Powdery mildew	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornel)	CCN	Eyespot	Crown rot	Black point
DURUM												
Caparoi ^{(b}	MR	MS	RMR	MRMS/S	MR	S	MS	MR	MRMS (P)		VS	MSS
DBA Bindaroi®	MR	MS	MR	MS	MS	MSS	MRMS	MR	MS		SVS	MRMS
DBA Lillaroi ^(b)	RMR	MS	RMR	S	MRMS	MS	MRMS	RMR	S		SVS	MS
DBA Mataroi ^(b)	MRMS	MS	MR	MSS	MRMS	S	MS	RMR	MRMS		SVS	MS
DBA Spes	R	MS	RMR	S	MRMS	S	MRMS	RMR	MS		VS	MS
DBA Vittaroi [®]	MR	MS	RMR	MSS	MRMS	MS	MS	MR	S		SVS	MSS
DBA-Artemis®	MR	MRMS	RMR	MRMS/S	MRMS	SVS	MS	MR	MS		SVS	MS
DBA-Aurora®	RMR	MRMS	RMR	MRMS/S	MRMS	MSS	MRMS	RMR	MSS		SVS	MS
Jandaroi ^(b)	MRMS	MRMS	MR	MSS	MRMS	S	MS	MRMS	MS		VS	MS
Patron ^(b)	RMR	MRMS	MR#	MRMS	MRMS	MSS	MRMS	MR	S		SVS	MSS
Westcourt ^(b)	RMR	MR	RMR	S	MRMS	S	MS	MR	MSS		VS	MSS



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

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

Table 18: Wheat disease guide for Victoria.

			Stripe rust (east coast resistance)				RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	Septoria tritici blotch	Yellow leaf spot	int)	Powdery mildew
	Stem rust	rust	Stripe rust (east coas		Crown rot	pot	resis	resis	oria t	w lea	Black tip (Black point)	dery
Variety	Sten	Leaf rust	Strip (east	CCN	Crow	Eyespot	RLN (<i>Prat</i>	RLN (<i>Prat</i>	Sept	Yello	Black tip (Black pc	Powe
Anapurna	MSS	MS	RMR	MRMS	SVS		MS	S (P)	MRMS	MRMS	MSS	RMR
Ascot ^(b)	MRMS	RMR	MSS	MR	S	S	S	S	S	MRMS	S	S
Ballista ^(b)	MR	S	MSS	MRMS	S	S	S	MRMS	SVS	MS	MS	SVS
Beckom ^(b)	MRMS	MSS	MRMS	R	S		S	MSS	S	MSS	MRMS	MSS
BigRed ^(b)	S	MRMS	RMR	S	MSS		MS	MS	MR	MR	MR	RMR
Boree ^(b)	MR	S	SVS	MSS	S		S	MSS	SVS	MRMS	S	SVS
Brumby ^(b)	MR	SVS	MS	MRMS	S	S	MRMS	MS (P)	S	MRMS	MSS	MR/S
Calibre ^(b)	MR	S	S	MRMS	S	S	S	MSS	S	MRMS	MSS	MSS
Catapult ^(b)	MR	S	S	R	MSS	S	S	MS	MSS	MRMS	S	S
Chief CL Plus ^(b)	MR	MR	SVS	MS	MSS	MSS	MRMS	MSS	S	MRMS	MS	SVS
Condo ^(b)	MR	S	MRMS/MS	MR	S		S	MS	S	MS	MS	MR
Coolah ^(b)	MR	RMR	MSS	S	MSS		S	MS	MSS	MSS	S	S
Coota ^(b)	RMR	MR	S	MR	MSS	S	MR	MS	S	MSS	MS	S
Cosmick ^(b)	MS	SVS	MSS	S	S		MSS	MSS	SVS	MRMS	MRMS	MSS
Cutlass ^(b)	R	RMR	MSS	MR	S		MSS	MSS	MSS	MSS	MS	MSS
Denison ^(b)	MS	S	S	MS	MSS	S	S	S	MSS	MRMS	MS	S
Dozer ^(b) CL Plus	MS	MSS	S	MS (P)	S	SVS (P)	MRMS	S	S (P)	MS	MRMS (P)	S
DS Bennett ^(b)	MS	SVS	S	S	VS		S	S	MSS	MRMS	MSS	R
DS Faraday ^(b)	RMR	RMR	MRMS	MS	MSS		S	MSS	MSS	MSS	MSS	
DS Pascal ^(b)	MSS	MRMS#	MRMS	S	S		S	S	MSS	MS	MS	RMR
DS Tull ^(b)	MR	MSS	MS	MSS	S		MSS	MSS	SVS	S	MRMS	
EG Jet ^(b)	S	S	MRMS	MRMS	S		S	S	MSS	MRMS	MS	SVS
EG Titanium	MS	MS	MR	R	MSS	S	MSS	MSS	MSS	MSS	MSS	S
EGA Gregory ⁽⁾	MR	MR	MS	S	S		S	MSS	MSS	S	MSS	RMR
EGA Wedgetail ^(b)	MRMS	MSS	MS	S	S		S	VS	MSS	MSS	MS	MRMS
Einstein	S	S	RMR	S	S (P)		MRMS	S	MSS	MR	R	
Emu Rock ^(b)	MS	SVS	SVS	S	MSS		MSS	S	S	MS	MSS	MSS
Genie ^(b)	MS (P)	S (P)	MRMS (P)						S (P)	MRMS (P)		SVS (P)
Hammer CL Plus ^(b)	MR	S	MS	MRMS	MSS	S	MSS	S	MSS	MRMS	MRMS	S
Hyperno ^{(b}	RMR	RMR	MR	MS	SVS		MS	RMR	MSS	MRMS	MS	RMR
IGW6755	MRMS	MS	MSS	MSS	S	MSS (P)	MSS	MR	MSS	MRMS	MR	S
Illabo ^{(b}	MRMS	S	MRMS	MRMS	S	S	MSS	MSS	MSS	MS	MRMS	R
Jillaroo ^{(b}	MS	S	MSS	MS	S	S	S	MS (P)	S	MS	MS	SVS
Kingston ^(b)	S	S	MSS	R	S	S	S	MRMS	S	MSS	MSS	S
Leverage ^(b)	MR	RMR#	MRMS	MS (P)	S	S (P)	S	MS	S	MRMS	MSS (P)	S
Longford	RMR	RMR	RMR	MS	MSS	MSS (P)	S	S	MRMS/S	MRMS	MRMS	RMR
Longsword ^(b)	MR	MS	MRMS/MS	MRMS	MSS	S	MRMS	MRMS	MS	MRMS	MS	S
LRPB Anvil® CL Plus	MR	SVS	S	MS	MSS	S	MSS	S	VS	MSS	S	SVS
LRPB Avenger®	MS	S	S	MRMS	S	S	MSS	MRMS	S	MS	MRMS	SVS
LRPB Bale ^(b)	MRMS	MSS	MRMS	R	S	S	S	S	MSS	SVS	MS	MS
LRPB Beaufort ^(b)	SVS	MSS	RMR	MS	S		MS	MSS	S	MRMS	MRMS	RMR
LRPB Dual ^(b)	MRMS	MSS	MS	R	S	S	MSS	MSS	MSS	S	S	S
LRPB Havoc ^(b)	S	S	MSS	S	MSS		S	MSS	MSS	MRMS	MS	S
LRPB Hellfire ^(b)	MR	MSS	MR	MS	MSS		MSS	MSS	S	MSS	S	S
											Continued	l on next pag



ntinued	on	next	page

							(S					
	Stem rust	Leaf rust	Stripe rust (east coast resistance)	CCN	Crown rot	Eyespot	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	Septoria tritici blotch	Yellow leaf spot	Black tip (Black point)	Powdery mildew
Variety						மி						
LRPB Impala ^{(b}	MR	SVS	MRMS	MSS	MSS		SVS	S	SVS	MSS	MS	R
_RPB Kittyhawk ^(b)	MRMS (S)	MR	MR	S	SVS	S	S	S	MRMS	MRMS	MRMS	MS
_RPB Lancer ^(b)	R	RMR	RMR	S	MSS		S	MS	MS	MS	MRMS	R
_RPB Major ^{(b}	MRMS	MR#	MRMS	MRMS (P)	S	S (P)	MSS	MSS	MSS	MS	MRMS (P)	MS
LRPB Matador ^{(b}	MS	MSS	MS	MS (P)	S	S (P)	S	MRMS	S (P)	MRMS	MRMS (P)	MS
_RPB Mustang ^{(b}	MRMS	MSS	MR	MR	MSS		S	MSS	S	MSS	MS	MSS
_RPB Nighthawk ^(b)	RMR	MSS	MR	MS	MSS		MSS	MS	MS	MS	MS	SVS
_RPB Oryx ^(b)	MR	RMR#	MS	S	MSS	S	MSS	MSS	SVS	MSS	MS	MR
LRPB Parakeet ^{(b}	MR	R	MR	MS	MSS	S	MRMS	S	SVS	MSS	MS	SVS
LRPB Raider®	RMR	RMR	MR	S	S		MSS	MS	S	MSS	MSS	S
LRPB Scotch®	MSS	MR#	MRMS	MS	S	S	MS	S	S	MRMS	MS	MR
LRPB Scout [⊕]	MRMS	MS	MS	R	S		S	MSS	S	SVS	S	MRMS
LRPB Stealth ^(b)	R	RMR#	RMR	S	MSS		MSS	S	MSS	MS	MRMS	MS
LRPB Trojan ^{(b}	MRMS	MR#	S	MS	MS	MS	MSS	MSS	S	MSS	MS	S
Mace ^(b)	MRMS	S	SVS	MRMS	S	S	MS	MS	SVS	MRMS	MRMS	MSS
Manning [⊕]	MR	MSS	RMR	S	VS	MS (P)	MSS	S	MRMS/S	MRMS	S	MS
Razor CL Plus ^(b)	MRMS	S	MRMS	MR	S	S	S	MS	SVS	MSS	MS	MSS
Reilly ^{(b}	MRMS	MSS	MS	R	S	S	MS	MSS	S	S	MSS	MSS
RGT Accroc [⊕]	MS	SVS	RMR	S	SVS	MSS (P)	MS	MSS	MS	MRMS	MRMS	MSS
RGT Calabro	MS	MSS	RMR	S	SVS		S	MS	MRMS	MR	MS	RMR
RGT Cesario®	RMR	RMR	RMR	MSS (P)	VS		MRMS	MSS	MRMS	MR		RMR
RGT Waugh ⁽⁾	MS	S	RMR	MS	S		MSS	MSS	MRMS#	MRMS	MRMS	R
RGT Zanzibar	VS	SVS	MR	MSS	S		S	MS (P)	MSS	MS	MRMS	RMR
RockStar ^{(b}	MRMS	S	S	MSS	S	S	MRMS	MS	S	MRMS	MSS	SVS
Saintly ^(b)	MS	RMR	MRMS	S	VS (P)		MS	RMR	MRMS/S	MRMS	MS	S
Scepter ^(b)	MRMS	MSS	MSS	MRMS	MSS	S	S	MSS	S	MRMS	MS	SVS
Severn ^(b)	MS	MRMS	RMR	MSS (P)	S		S	MRMS	MSS	MRMS	MR	RMR
Sheriff CL Plus ^(b)	MS	SVS	SVS	MS	S	S	MRMS	MRMS	S	MRMS	MS	SVS
Soaker ^{(b}	MR (P)	S (P)	MS (P)						S (P)	MS (P)		S (P)
SQP Revenue ^(b)	RMR	VS	MR	S	S	S	S	S	MSS	MRMS	MS	R
Sting ^{(b}	MRMS	SVS	S	MS	MSS		MS	MS	SVS	MRMS	S	SVS
Stockade ^(b)	MS	MR	MR	MRMS	S		S	MSS	MS	MRMS	MRMS	SVS
Sunblade CL Plus®	MS	MSS	MRMS	MSS	S		MSS	MRMS	S	MSS	MRMS	S
Suncentral ^{(b}	MRMS	RMR		S	MSS		MRMS	MRMS	S	MSS	MRMS	SVS
Sundancer ^{(b}	MR	RMR	MR	MS (P)	MSS		MSS	MS	MSS	MS	MSS (P)	S
Sunflex ^(b)	MR	RMR#	MRMS	MS	MSS		S	MSS	SVS	MS	MSS	S
Sunmaster ^{(b}	MS	RMR	MRMS	MSS	MSS		MRMS	MS	S	MSS	MR	MSS
Sunprime ^(b)	MS	MR#	MS	MS	MSS		S	S	S	MSS	MSS	14100
Suntop®	MRMS	MR	MRMS	S	MSS		S	MRMS	MSS	MSS	MSS	S
omahawk CL Plus®	MR	S	MSS	MRMS (P)	S	S (P)	S	MS	S (P)	MRMS	S (P)	SVS
/aliant ⁽⁾ CL Plus		S	S		MSS		S			MRMS		VS
	MR			MSS (P)		MSS		S (P)	MSS		MS (P)	
Vixen ^{(b}	MRMS	SVS	SVS	MSS	S	S	MRMS	MS	S	MRMS	MSS	SVS
Willaura ^{(b} Yitpi	MR S	MRMS S	S MS	MS MR	S		MSS MSS	MRMS S	S	MS SVS	MRMS MS	SVS



Table 18: Whe	able 18: Wheat disease guide for Victoria (continued).											
Variety	Stem rust	Leaf rust	Stripe rust (east coast resistance)	CCN	Crown rot	Eyespot	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	Septoria tritici blotch	Yellow leaf spot	Black tip (Black point)	Powdery mildew
DURUM												
Caparoi ^(b)	MR	RMR	MS	MRMS (P)	VS		MS	MR	MRMS/S	MR	MSS	S
DBA Bindaroi®	MR	MR	MS	MS	SVS		MRMS	MR	MS	MS	MRMS	MSS
DBA Lillaroi®	RMR	RMR	MS	S	SVS		MRMS	RMR	S	MRMS	MS	MS
DBA Mataroi®	MRMS	MR	MS	MRMS	SVS		MS	RMR	MSS	MRMS	MS	S
DBA Spes	R	RMR	MS	MS	VS		MRMS	RMR	S	MRMS	MS	S
DBA Vittaroi ^{(b}	MR	RMR	MS	S	SVS		MS	MR	MSS	MRMS	MSS	MS
DBA-Artemis ^(b)	MR	RMR	MRMS	MS	SVS		MS	MR	MRMS/S	MRMS	MS	SVS
DBA-Aurora®	RMR	RMR	MRMS	MSS	SVS		MRMS	RMR	MRMS/S	MRMS	MS	MSS
Jandaroi ^(b)	MRMS	MR	MRMS	MS	VS		MS	MRMS	MSS	MRMS	MS	MS
Patron ^(b)	RMR	MR#	MRMS	S	SVS		MRMS	MR	MRMS	MRMS	MSS	MSS
Westcourt ^(b)	RMR	RMR	MR	MSS	VS		MS	MR	S	MRMS	MSS	S



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

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

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
Neo ^Φ CL	InterGrain	Under malt evaluation	4.25	Neo ^(b) CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to mediumhigh rainfall environments. Neo ^(b) 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 ^(b) 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 ^(b) CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025.
Spinnaker ^{(b}	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.

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



Barley variety yield performance – Mallee South Australia and Victoria

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: Birchip ı	Table 1: Birchip main season barley.							
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	5.54	5.57	2.27	5.12	4.92			
Neo® CL*					124			
Combat ^(b)				105	114			
Cyclops ^(b)		111	115	99	124			
Minotaur ^(b)		109	111	105	119			
Rosalind ^(b)	114	108	97	102	110			
Spinnaker ^(b)				110	100			
Laperouse ^(b)	100	105	117	96	121			
RGT Planet [₼]	116	105	90	112	95			
Yeti ^(b)	98	104	116	97	120			
Maximus ^(b) CL*	105	106	101	92	120			
Zena ⁽¹⁾ CL*				110	94			
Spartacus CL ^{(b*}	105	104	91	91	110			
Titan AX ^{(b*}				96	106			
Leabrook ^(b)	88	100	124	98	105			
Beast ^(b)	90	100	118	94	108			
Sowing date	15 May	14 May	10 May	9 May	11 May			
Rainfall J-M (mm)	14	101	25	60	23			
Rainfall A-O (mm)	197	205	172	384	118			

Special thanks to 2023 trial cooperator, Linc Lehmann.

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 3: Lamero	Table 3: Lameroo main season barley.							
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	3.76	3.92	0.84	4.13	3.36			
Neo® CL*					115			
Combat ^(b)			120	111	117			
Spinnaker ^(b)				116	111			
Rosalind [®]	110	113	109	107	109			
RGT Planet ^(h)	105	107	92	117	109			
Zena (b CL*				115	107			
Cyclops ^(b)		115	115	100	108			
Leabrook ^(b)	110	109	122	99	101			
Minotaur ^(b)		110	105	105	107			
Beast ^(b)	111	109	123	95	101			
Fathom ^(b)	106	106	115	97	102			
Yeti ^(b)	106	106	113	95	99			
La Trobe ^(b)	102	106	110	95	104			
Titan AX ^{(b*}			120	95	100			
Compass ^(b)	110	104	122	93	96			
Sowing date	21 May	6 May	26 May	26 May	9 May			
Rainfall J–M (mm)	8	56	52	30	35			
Rainfall A–O (mm)	197	241	149	302	194			

Special thanks to 2023 trial cooperator, Lampata, RM & S Pocock.

Table 2: Cooke Plains main season barley.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		6.03	4.01				
Combat ^(b)			118				
Leabrook ^{(b}		103	117				
Titan AX ^{(b*}			119				
Minotaur ⁽⁾		105	108				
RGT Planet ^(b)		109	100		Trial results below standard		
Compass ^(b)	ja	100	113	Trial failed			
Beast ^(b)	Compromised trial	99	111				
Cyclops ^(b)	omis	99	111				
Commodus ^(†) CL*	mpr	98	110				
Yeti ^(b)	<u> </u>	101	105				
Rosalind ^(b)		103	100				
Laperouse ^(b)		98	106				
Commander ^(b)		96	108				
Fathom ^(b)		96	103				
Buff ^(b)		93	100				
Sowing date	17 May	12 May	10 Jun	1 Jun	8 Jun		
Rainfall J-M (mm)	14	34	49	24	56		
Rainfall A-O (mm)	241	292	232	342	210		

Special thanks to 2023 trial cooperator, Matthew Ballard, Wondallee Pastoral Co..

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 4: Manan	gatang n	nain sea:	son barl	ey.	
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.52	2.70	3.01	5.95	2.79
Combat ^(b)				116	120
Titan AX ^{(b*}				111	111
Cyclops®		116	119	112	119
Neo® CL*					109
Leabrook ^(b)	120	113	118	106	106
Beast ^(b)	115	115	119	101	106
Minotaur ^(b)		110	109	110	112
Laperouse ^(b)	103	111	109	107	112
Compass ^(b)	121	111	115	101	101
Commodus ^(h) CL*		109	113	100	101
Yeti ^(b)	105	114	110	101	106
Commander ^(b)	108	96	102	108	106
Fathom ^(b)	105	109	112	98	104
Rosalind ^(b)	97	111	109	99	104
Buff ^(b)	101	101	107	101	105
Sowing date	8 May	12 May	25 May	17 May	8 May
Rainfall J-M (mm)	18	48	48	41	25
Rainfall A–O (mm)	133	227	150	462	144

Special thanks to 2023 trial cooperator, Brad Plant.



^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 5: Murray	ville mai	n seasoı	n barley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.81	2.41	1.94	4.81	4.39
Neo® CL*					123
Combat ^(b)				115	120
Leabrook ^(b)	125	119	115	107	94
Cyclops ^(b)		109	108	105	121
Minotaur ^(b)		106	107	108	118
Titan AX ^{(b*}				107	98
Spinnaker ^(b)				111	109
Beast ^(b)	120	120	112	101	95
Rosalind ^(b)	102	114	106	102	109
Compass ^(b)	127	118	112	102	85
RGT Planet ^(b)	99	102	103	110	106
Yeti ^(b)	107	112	107	99	105
Commodus ^(b) CL*		113	109	100	87
Laperouse ^(b)	97	103	103	99	111
Zena ⁽⁾ CL*				106	103
Sowing date	7 May	11 May	11 May	11 May	11 May
Rainfall J-M (mm)	33	50	38	49	22
Rainfall A–O (mm)	156	240	149	369	229

Sp	pecial	thanks	to	2023	trial	cooperato	r, Giles	Oster.
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^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 7: Paruna	Table 7: Paruna main season barley.							
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.64	2.75	0.93	4.12	2.48			
Combat ^(b)			136	126	112			
Neo® CL*					111			
Leabrook ^(b)	139	114	107	106	120			
Beast ^(h)	141	113	110	102	120			
Cyclops ^(b)		109	119	118	111			
Titan AX ^{(b*}			107	111	116			
Compass ^(b)	143	110	102	99	119			
Rosalind ^(b)	115	114	117	104	107			
Commodus ^(†) CL*		106	101	98	116			
Yeti ^(b)	127	106	96	101	116			
Fathom ^(b)	121	109	116	101	109			
Minotaur ^(b)		106	105	114	106			
Spinnaker ^(b)				109	99			
Laperouse ^(b)	107	98	96	106	110			
La Trobe ^(b)	104	105	125	99	101			
Sowing date	13 May	5 May	26 May	4 May	22 May			
Rainfall J-M (mm)	16	56	20	47	26			
Rainfall A-O (mm)	126	214	129	363	153			

Table 6: Palmer	Table 6: Palmer main season barley.								
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)		2.13	2.61	3.94	3.79				
Combat ^(b)			124	108	110				
Leabrook ^(b)		130	128	107	108				
Beast ^(b)		134	126	101	108				
Compass ^(b)		130	127	103	106				
Titan AX ^{(b*}			130	102	106				
Neo ^(b) CL*					109				
Commodus ⁽¹⁾ CL*		125	124	100	105				
Cyclops ^(b)	No trial	123	119	97	108				
Yeti ^(b)		121	115	97	107				
Fathom ^(b)		122	115	98	104				
Rosalind ^(b)		118	104	104	106				
Minotaur ^(b)		108	107	103	105				
Laperouse ^(b)		113	114	93	104				
Spinnaker®				112	103				
Maximus ⁽¹⁾ CL*		119	107	88	105				
Sowing date		4 May	8 Jun	9 May	16 May				
Rainfall J–M (mm)		32	51	55	42				
Rainfall A-O (mm)		222	285	316	175				

Special thanks to 2023 trial cooperator, Steen Paech, Hillydale.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 8: Rainbov	Table 8: Rainbow main season barley.							
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	3.63	3.21	3.29	4.70	3.88			
Neo ^(b) CL*					110			
Combat ^(b)				113	113			
Cyclops ^(b)		108	109	107	109			
Spinnaker ^(b)				115	103			
Minotaur ^(b)		110	107	111	106			
Rosalind ^(b)	114	100	100	110	104			
RGT Planet ^(b)	101	110	100	116	100			
Leabrook ^(b)	111	100	111	94	108			
Titan AX ^{(b*}				92	109			
Zena (b CL*				113	99			
Beast ^(b)	115	94	107	93	107			
Yeti ^(b)	108	96	104	98	104			
Laperouse ^(b)	101	100	105	98	104			
Fathom ^(b)	112	95	102	95	104			
Compass ^(b)	110	93	108	87	106			
Sowing date	16 May	22 May	18 May	19 May	16 May			
Rainfall J-M (mm)	22	88	51	76	33			
Rainfall A-O (mm)	199	253	205	421	198			



Special thanks to 2023 trial cooperator, Bernie Lehmann.

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

Special thanks to 2023 trial cooperator, Brett Fisher.

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

Table 9: Ultima	Table 9: Ultima main season barley.								
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)		2.70	1.30	6.92	2.22				
Neo® CL*					112				
Combat ^(b)				113	126				
Cyclops ^(b)		118	105	107	124				
Minotaur ^(b)		110	104	109	114				
Rosalind ^(b)		114	113	106	102				
Spinnaker ^{(b}	<u>la</u>			112	99				
Leabrook ^(b)	Compromised trial	115	110	99	114				
Yeti ^(b)	omis	117	112	99	109				
Beast ^(b)	mprc	119	113	96	112				
Titan AX ^{(b*}				98	121				
Laperouse ^(b)		112	102	99	116				
RGT Planet®		94	102	112	92				
Maximus ^(b) CL*		118	110	96	106				
Fathom ^(b)		112	107	96	106				
Zena ⁽¹⁾ CL*				109	89				
Sowing date	8 May	11 May	11 May	11 May	11 May				
Rainfall J–M (mm)	18	47	29	63	34				
Rainfall A-O (mm)	161	233	199	453	209				

S	pecial	thanks	to	2023	trial	coop	perator,	Warrick	Grey.
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^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 10: Walpe	up main	season l	barley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.16	4.78	3.22	5.68	4.39
Neo® CL*					123
Combat ^(b)				116	117
Cyclops ^(b)		109	115	107	121
Minotaur ^(b)		108	107	109	117
Rosalind ^(b)	118	104	108	105	114
Spinnaker ^(b)				113	107
Yeti ^(b)	121	102	108	98	114
Beast ^(b)	131	100	115	98	105
Leabrook ^(b)	125	100	115	102	102
Laperouse ^(b)	105	104	107	99	113
Titan AX ^{(b*}				102	101
Maximus ^(b) CL*	117	102	106	93	116
RGT Planet ^(b)	94	103	98	112	102
Fathom ^(b)	119	100	110	97	102
La Trobe ^(b)	113	101	107	94	106
Sowing date	8 May	11 May	25 May	13 May	11 May
Rainfall J-M (mm)	9	85	54	86	55
Rainfall A-O (mm)	118	247	189	444	228



Special thanks to 2023 trial cooperator, Mick Pole.

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

LENTIL

Barley variety quality – Mallee South Australia and Victoria

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 Mallee South Australia and Victoria region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

Protein and yield comparisons

Figure 1: Protein (%) and yield (t/ha) comparisons for main season barley varieties from nine NVT sites in Mallee SA-Victoria in 2022.

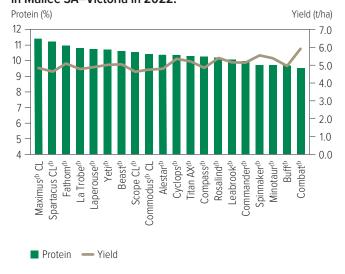
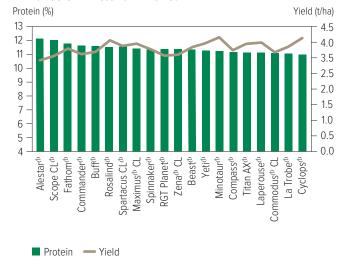


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from nine NVT sites in Mallee SA-Victoria in 2023.



Test weight comparisons

Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from nine NVT sites in Mallee SA-Victoria in 2022.

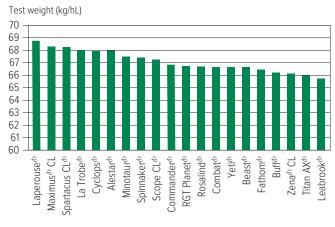
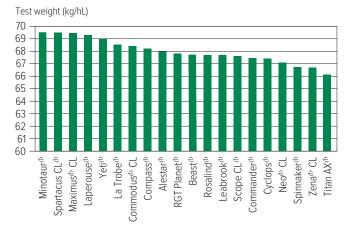


Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from nine NVT sites in Mallee SA-Victoria in 2023.



Screenings comparisons

Figure 5: Screenings (<2.2mm) comparisons for main season barley varieties from nine NVT sites in Mallee SA–Victoria in 2022.



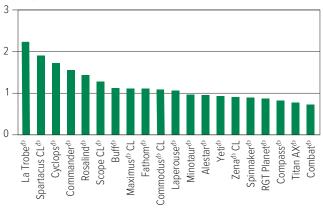
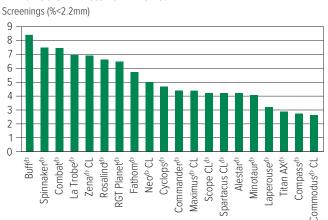


Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from nine NVT sites in Mallee SA–Victoria in 2023.



Retention comparisons

Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from nine NVT sites in Mallee SA–Victoria in 2022.

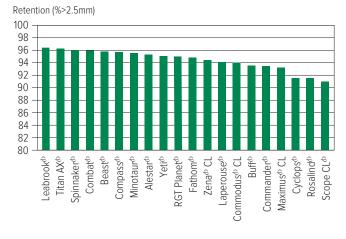
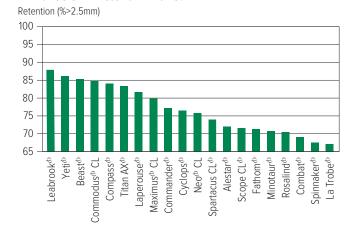


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from nine NVT sites in Mallee SA–Victoria in 2023.





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

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

Table 11: Barley disea					_						
Variety	Leaf rust	Net form net blotch	Spot form net blotch	Leaf scald	Ramularia	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	CCN	Crown rot	Black point	Powdery mildew
Alestar ^{(b}	MSS	MRMS-S	S	SVS	SVS	MR	MR	R^ (P)	S	MRMS	MR
Banks ^{(b}	MRMS	MR	S	MS-SVS	VS	MS	MR	S	MSS	MS	MS
Bass ^{(b}	S	MS-SVS	MSS	MSS	VS	MS	MRMS	S	MSS	MRMS	S
Beast ^{(b}	MS	MRMS-S	MS	SVS	SVS	MRMS	MRMS	MR	S	MSS	S
Bottler ^{(h}	MSS	R-MS	MSS	SVS	SVS	MS	RMR		SVS	MRMS	RMR
Buff ^(b)	SVS	MR-MS	MSS	MS-VS	SVS	MRMS	MS		S	MS	S
Combat ^{(b}	SVS	MRMS-S	RMR	MS-S	SVS	MRMS	MS	MR	S	MSS	MS
Commander ^(b)	MSS	S-VS	MSS	SVS	SVS	MRMS	MRMS	R	S	MSS	MSS
Commodus ^(b) CL	S	MRMS-MSS	MSS	MSS-SVS	SVS	MRMS	MRMS	R	S	MS	MSS
Compass ^(h)	S	MRMS-S	MS	MSS-SVS	SVS	MRMS	MR	R	MSS	MSS	S
Cyclops ^(b)	S	MR-MS	MSS	S	SVS	MRMS	MRMS	S	MSS	MSS	SVS
Fairview ^(b)	S	SVS	S	SVS	SVS	MR	MR		MSS	MS	R
Fandaga ^{(h}	MSS	MRMS#	S	SVS	VS	MR	MR	R	MSS	MRMS	R
Fathom ^(b)	MSS	MSS-SVS	RMR	R-S	SVS	MRMS	MR	R	SVS	MSS	MRMS
Flinders ^(b)	S	MSS	S	MSS-SVS	SVS	MRMS	MR	S	MSS	MRMS	RMR
Keel	S	MS-SVS	MR	MS-SVS	SVS	MS	MRMS	R	S	MSS	S
Kiwi	MSS	MRMS	MSS	SVS	VS	MRMS	RMR	S	MSS	MS	RMR
La Trobe ^{(b}	S	MS-S	S	R-SVS	SVS	MRMS	MRMS	R	S	MSS	MSS
Laperouse ^(h)	S	MRMS	MRMS	SVS	VS	MRMS	MR	S	S	MSS	MSS
Leabrook ^(b)	S	MR-MSS	MS	MRMS-SVS	VS	MRMS	RMR	RMR	S	MS	S
Litmus ^(b)	S	S-VS	S	VS	VS	MS	MRMS	MS	S	MS	MS
Maximus ⁽⁾ CL	S	MR-MS	MS	R-SVS	VS	MRMS	MRMS	R	S	MSS	S
Minotaur ^{(b}	SVS	MR-MS	S	VS	SVS	MRMS	MRMS	R	MSS	MRMS	S
Neo ⁽⁾ CL	MSS (P)	MS (P)	MR (P)	S (P)	SVS (P)	RMR (P)	MR (P)	R		MRMS (P)	RMR (P)
RGT Planet ⁽¹⁾	S	MRMS-SVS	SVS	R-SVS	SVS	MRMS	MR	R (P)	MSS	MRMS	RMR
Rosalind ^(b)	MSS	MRMS	S	MR-S	VS	MRMS	MRMS	R	S	MS	MSS
SakuraStar	MSS	S	MS	MS-SVS	SVS	MR	MR	R	S	MS	MSS
Scope CL ^(b)	S	R-MR	MSS	MRMS-SVS	SVS	MRMS	MRMS	S	S	MS	MRMS
Spartacus CL ^(b)	MSS	MS-VS	S	R-SVS	VS	MRMS	MRMS	R	S	MSS	MSS
Spinnaker ^{(b}	S	SVS	SVS	S	VS	MR	MS	S	S	MRMS	RMR
Titan AX ^(†)	SVS	MRMS-S	MS	VS	VS	MR	MR	MR (P)	S	MSS	MSS
Topstart	S	MRMS-SVS	S	S	SVS	RMR	RMR	S	MSS	MRMS	RMR
Urambie	S	R-MR	S	R-S	VS	MRMS	MR		MSS	MRMS	MS
Westminster ^(b)	MS	MRMS	S	R-S	SVS	MRMS	MS		MSS	MRMS	RMR
Yeti ^(h)	SVS	MR-MS	MS	VS	VS	MR	MR	RMR	S	MSS	S
Zena ^(†) CL	S	MR-S	S	R-S	VS	MRMS	MR	R	S	MRMS (P)	RMR

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, # warning, may be more susceptible to alternate pathotypes,

^ line contains a few susceptible off types.



Table 12: Barley dis	ease guide fo	r Victoria.							
Variety	Leaf scald	Spot form net blotch	Net form net blotch	Leaf rust	CCN	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornel)	Ramularia	Powdery mildew
Alestar ^(b)	SVS	S	S	MS	R^ (P)	MR	MR	SVS	MR
Banks ^(b)	SVS	S	MR	S	S	MS	MR	VS	MS
Bass ^(b)	S	MSS	S	SVS	S	MS	MRMS	VS	S
Beast ^(b)	SVS	MS	MRMS	S	MR	MRMS	MRMS	SVS	S
Bottler ^(b)	SVS	MSS	MR	MRMS		MS	RMR	SVS	RMR
Buff ^(b)	SVS	MSS	MS	SVS		MRMS	MS	SVS	S
Combat ^(b)	S	RMR	MRMS#	S	MR	MRMS	MS	SVS	MS
Commander ⁽¹⁾	SVS	MSS	S	SVS	R	MRMS	MRMS	SVS	MSS
Commodus ^(b) CL	SVS	MSS	MSS	S	R	MRMS	MRMS	SVS	MSS
Compass ^(b)	SVS	MS	MS	SVS	R	MRMS	MR	SVS	S
Cyclops ^(b)	S	MS	MRMS	SVS	S	MRMS	MRMS	SVS	SVS
Fairview ^(b)	SVS	S	SVS	S		MR	MR	SVS	R
Fandaga ^(h)	SVS	S	MRMS	MSS	R	MR	MR	VS	R
Fathom ^{(b}	S	RMR	MSS	MS	R	MRMS	MR	SVS	MRMS
Flinders ^(b)	SVS	S	MS	S	S	MRMS	MR	SVS	RMR
Keel	SVS	MR	MS#	SVS	R	MS	MRMS	SVS	S
Kiwi	SVS	MSS	MRMS#	MSS	S	MRMS	RMR	VS	RMR
La Trobe ^(h)	SVS	S	MS	S	R	MRMS	MRMS	SVS	MSS
Laperouse ^(h)	VS	MRMS	MRMS#	SVS	S	MRMS	MR	VS	MSS
Leabrook ^(b)	SVS	MS	MS#	SVS	RMR	MRMS	RMR	VS	S
Litmus ^(b)	VS	S	S	SVS	MS	MS	MRMS	VS	MS
Maximus ^(b) CL	SVS	MS	MRMS	S	R	MRMS	MRMS	VS	S
Minotaur ^(b)	VS	S	MRMS	VS	R	MRMS	MRMS	SVS	S
Neo [⊕] CL	S (P)	MR (P)	MS (P)	S (P)	R	RMR (P)	MR (P)	SVS (P)	RMR (P)
RGT Planet ^(b)	SVS	SVS	SVS	MRMS	R (P)	MRMS	MR	SVS	RMR
Rosalind ^(b)	S	S	MR	MRMS	R	MRMS	MRMS	VS	MSS
SakuraStar	SVS	MS	MSS	S	R	MR	MR	SVS	MSS
Scope CL ^(b)	SVS	MSS	MR#	S	S	MRMS	MRMS	SVS	MRMS
Spartacus CL®	SVS	S	S	S	R	MRMS	MRMS	VS	MSS
Spinnaker ^{(b}	S	SVS	S	S	S	MR	MS	VS	RMR
Titan AX®	VS	MS	MS	SVS	MR (P)	MR	MR	VS	MSS
Topstart	SVS	S	MS	MRMS	S	RMR	RMR	SVS	RMR
Urambie	MS	S	MRMS	S		MRMS	MR	VS	MS
Westminster ^(b)	SVS	S	MRMS	MRMS		MRMS	MS	SVS	RMR
Yeti ^(h)	VS	MS	MR#	SVS	RMR	MR	MR	VS	S
Zena ^(b) CL	S	S	SVS	MS	R	MRMS	MR	VS	RMR

Re = 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, # warning, may be more susceptible to alternate pathotypes, ^ line contains a few susceptible off types.



OAT

New oat varieties

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

^{*} 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



Oat variety yield performance - Mallee South Australia and Victoria

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: Waikerie	e oat.				
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.63	2.71		3.68	1.55
Koala ^(b)	84	107		132	107
13008-18				106	115
Bannister ^(b)	98	109		115	109
Williams ^(b)	89	107	Compromised trial	106	110
Archer ^{(b*}			nisec		118
Yallara ^(b)	110	104	pron	97	89
Bilby ^(b)	109	101	Com	91	104
Kultarr ^(b)					92
Kowari®	110	97		86	98
Wallaby ^(b)					92
Sowing date	14 May	6 May	28 May	6 May	17 May
Rainfall J-M (mm)	10	93	19	28	19
Rainfall A-O (mm)	91	192	101	313	82

Special thanks to 2023 trial cooperator, B Kroehn, Borung Poll Merino Stud.



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

Oat variety disease ratings - South Australia and Victoria

The following tables contain varietal ratings for the predominant diseases of oat in South Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 2: Oat disea	se guide for	South Austi	ralia.						
Variety	Stem rust (east)	Leaf rust (crown rust)	Barley yellow dwarf virus (BYDV)	CCN	Stem nematode resistance	Stem nematode tolerance	Septoria	Bacterial blight	Red leather leaf
Archer ^(b)	MSS	R/S (P)	MSS (P)		VS (P)	I (P)	MRMS (P)	MSS (P)	SVS (P)
Bannister ^(b)	S	MSS	MS	MR	MRMS	MT	MSS	S	MSS-SVS
Bilby ^(b)	S	MSS	S	S	S	MI	S	SVS	MS
Brusher ^(b)	SVS	MR	S	MR	S	MT	MSS	SVS	MS
Carrolup	S	S	SVS	VS	S	I	MSS	MSS	SVS
Durack ^(h)	S	S	S	MRMS	S	MT	S	S	SVS
Echidna	S	SVS	MSS	MS	MRMS	MT	SVS	S	MSS
Goldie ^(b)	SVS	SVS	MS	MR	S	I	MS	S	SVS
Kingbale ^(b)	MSS	S	MS	R	MR	MT	MSS	MSS (P)	S (P)
Koala ^{(b}	MS	MSS	MSS	R	MS	MT	MSS	S	S
Kojonup ^(b)	S	S	MS	VS	MS	MT	MSS	SVS	S
Kowari [®]	S	SVS	S	S	S	I	S	S	S
Kultarr ^(b)	SVS (P)	MR (P)	MSS (P)		S (P)	MI (P)	MS (P)	MS (P)	S (P)
Mitika ^(b)	S	S	SVS	VS	S	MT	SVS	S	SVS
Mulgara ^{(b}	S	MR	MSS	R	MR	MT	S/MS	MSS	SVS
Tungoo ^(b)	S	MR	MSS	MR	R	MT	MRMS#	S	MRMS
Wallaby ^(b)	SVS (P)	MR (P)	MS (P)		S (P)	MI (P)	MS (P)	MSS (P)	SVS (P)
Wandering	SVS	SVS	MSS	VS	S	MT	MSS	S	S
Williams ^(b)	S	MRMS	MSS	S	S	MI	MSS	MSS	MS
Wintaroo	S	S	MS	R	MR	MT	MS#	S	S
Yallara ^{(b}	S	S	S	R	MS	MI	MSS	S	SVS



Learn more via the NVT Disease Ratings. R = Ratings. R = Ratings R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, VS

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.

Table 3: Oat dise	ease guide for Vic	toria.					
Variety	Leaf rust (crown rust)	Stem rust	Bacterial blight	Barley yellow dwarf virus (BYDV)	CCN	Red leather leaf	Septoria blotch
Archer ^(b)	R/S (P)	MSS	MSS (P)	MSS (P)		SVS (P)	MRMS (P)
Bannister ^(b)	MSS	S	S	MS	MR	MSS-SVS	MSS
Bilby ^(b)	MSS	S	SVS	S	S	MS	S
Brusher ^(b)	MR	SVS	SVS	S	MR	MS	MSS
Carrolup	S	S	MSS	SVS	VS	SVS	MSS
Durack ^(b)	S	S	S	S	MRMS	SVS	S
Echidna	SVS	S	S	MSS	MS	MSS	SVS
Goldie ^(b)	SVS	SVS	S	MS	MR	SVS	MS
Kingbale ^(b)	S	MSS	MSS (P)	MS	R	S (P)	MSS
Koala®	MSS	MS	S	MSS	R	S	MSS
Kojonup ^(b)	S	S	SVS	MS	VS	S	MSS
Kowari₼	SVS	S	S	S	S	S	S
Kultarr®	MR (P)	SVS (P)	MS (P)	MSS (P)		S (P)	MS (P)
Mitika ^(b)	S	S	S	SVS	VS	SVS	SVS
Mulgara ^(b)	MR	S	MSS	MSS	R	SVS	S/MS
Tungoo®	MR	S	S	MSS	MR	MRMS	MRMS#
Wallaby ^(b)	MR (P)	SVS (P)	MSS (P)	MS (P)		SVS (P)	MS (P)
Wandering	SVS	SVS	S	MSS	VS	S	MSS
Williams ^(b)	MRMS	S	MSS	MSS	S	MS	MSS
Wintaroo	S	S	S	MS	R	S	MS#
Yallara ^{(b}	S	S	S	S	R	SVS	MSS

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.



CANOLA

New canola varieties

The following information is for canola varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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



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: Birchip I	ow-med	rainfall	GLY.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.65	2.69		2.54	2.74
InVigor® R 4520P		109		107	110
InVigor® LR 4540P				107	110
Nuseed® Hunter TF				106	107
InVigor® R 4022P	113	103		101	103
Pioneer® 44Y30 RR			Trial	104	103
PY424GC			failed		104
PY323G					101
Pioneer® 44Y27 (RR)	98	101		102	102
Hyola® Regiment XC					101
Nuseed® Emu TF		101		92	99
Sowing date	30 Apr	22 Apr	10 May	21 Apr	11 May
Rainfall J–M (mm)	14	101	25	60	23
Rainfall A–O (mm)	197	205	172	384	118

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

Table 2: Hopeto	un low-n	ned rain	fall GLY.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.91	2.12		3.93	1.14
InVigor® R 4520P		107		106	105
InVigor® LR 4540P				107	106
Nuseed® Hunter TF				107	110
InVigor® R 4022P	115	103		101	96
PY323G			Trial		105
Pioneer® 44Y30 RR			failed	104	103
Hyola® Regiment XC					111
PY424GC					97
Nuseed® Emu TF		105		94	103
Pioneer® 44Y27 (RR)	98	101		104	97
Sowing date	26 Apr	24 Apr	25 May	26 Apr	24 Apr
Rainfall J–M (mm)	16	119	31	43	30
Rainfall A–O (mm)	152	232	168	360	161

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

Table 3: Lameroo low-med rainfall GLY.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)				2.05				
InVigor® R 4520P				122				
InVigor® LR 4540P				121				
Nuseed® Hunter TF			Trial failed	113				
InVigor® R 4022P		No trial		110	Trial failed			
Pioneer® 44Y27 (RR)				105				
Pioneer® 44Y30 RR	No trial			104				
Nuseed® Emu TF				102				
Nuseed® Raptor TF				95				
Hyola® Battalion XC				87				
DG Lofty TF				82				
Sowing date			25 May	3 May	27 Apr			
Rainfall J-M (mm)			52	30	36			
Rainfall A-O (mm)			149	302	194			

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

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.52	2.50		2.54	2.73
PY421C					115
Pioneer® 44Y94 CL				110	109
Pioneer® 44Y90 (CL)	110	103			
Hyola® Continuum CL				101	101
Saintly CL	101		Trial		
Hyola® 575CL	95		failed		
Pioneer® 43Y92 (CL)	97	98		100	98
Nuseed® Ceres IMI				96	99
Hyola® Equinox CL				98	
Hyola® Solstice CL					95
Sowing date	30 Apr	22 Apr	10 May	21 Apr	24 Apr
Rainfall J–M (mm)	14	101	25	60	23
Rainfall A–O (mm)	197	205	172	384	118

Special thanks to 2023 trial cooperator, Linc Lehmann.

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 and Hyola® Regiment XC.

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



Table 5: Hopetoun low-med rainfall IMI.												
Year	2019	2020	2021	2022 2023 3.82 1.34								
Mean yield (t/ha)	1.92	2.04		3.82	1.34							
PY421C					117							
Pioneer® 44Y94 CL				109	113							
Pioneer® 44Y90 (CL)	109	102										
Saintly CL	103											
Hyola® Continuum CL			Trial	99	108							
Pioneer® 43Y92 (CL)	96	98	failed	100	104							
Hyola® 575CL	93]									
Hyola® Equinox CL]	96								
Nuseed® Ceres IMI				95	106							
Hyola® Solstice CL					122							
Sowing date	26 Apr	24 Apr	25 May	26 Apr	24 Apr							
Rainfall J–M (mm)	16	119	31	43	30							
Rainfall A–O (mm)	152	232	168	360	161							

Special thanks to 2023 trial cooperator, Ross Brown.

 $\dot{\text{Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should}$ 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 and Hyola® Regiment XC.

Learn more via the NVT Long Term Yield Reporter

Table 6: Lameroo low-med rainfall IMI.												
Year	2019	2021	2022	2023								
Mean yield (t/ha)	0.96	1.02		2.19	1.57							
PY421C					102							
Pioneer® 44Y94 CL	103			114	100							
Saintly CL	107											
Pioneer® 44Y90 (CL)	103	103										
Nuseed® Ceres IMI			Trial	97	109							
Hyola® Continuum CL			failed	99	102							
Hyola® Equinox CL				91								
Pioneer® 43Y92 (CL)	97	101		95	100							
Hyola® Solstice CL					112							
VICTORY® V7002CL		100										
Sowing date	11 May	28 Apr	25 May	3 May	27 Apr							
Rainfall J–M (mm)	2	56	52	30	36							
Rainfall A–O (mm)	166	241	149	302	194							

Special thanks to 2023 trial cooperator, Longtrail Farms, Parilla.

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 and Hyola® Regiment XC.

Learn more via the NVT Long Term Yield Reporter

Table 7: Birchip low-med rainfall TT.												
Year	2019	2020	2021	2022	2023							
Mean yield (t/ha)	2.41	2.46		2.28	2.75							
Hyola® Blazer TT	115	109			111							
Hyola® Defender CT				109	107							
InVigor® LT 4530P		104		107	106							
Renegade TT ^(b)				103	105							
DG Bidgee TT ^(b)			Trial	105	102							
HyTTec® Trident	100	104	failed	108	108							
HyTTec® Trophy	102	104		107	107							
InVigor® T 4510	104	103		105	105							
HyTTec® Velocity				104	108							
Hyola® Enforcer CT	98	99		105	102							
Sowing date	30 Apr	22 Apr	10 May	21 Apr	25 Apr							
Rainfall J–M (mm)	14	101	25	60	23							
Rainfall A-O (mm)	197	205	172	384	118							

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

Table 8: Hopetoun low-med rainfall TT.												
Year	2019	2020	2021	2022	2023							
Mean yield (t/ha)	1.61	2.17		3.67	0.98							
Hyola® Blazer TT		107			124							
HyTTec® Trident	103	105		109	119							
Hyola® Defender CT				106	115							
HyTTec® Velocity		109		105	122							
HyTTec® Trophy	103	105	Trial	107	120							
InVigor® LT 4530P		102	failed	108	94							
InVigor® T 4510	107	103		106	105							
Renegade TT ^(b)				102	94							
Hyola® Enforcer CT		101		103	121							
DG Bidgee TT ^(b)				100	109							
Sowing date	26 Apr	24 Apr	25 May	26 Apr	24 Apr							
Rainfall J–M (mm)	16	119	31	43	30							
Rainfall A-O (mm)	152	232	168	360	161							

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



Table 9: Lameroo low-med rainfall TT.												
Year	2019	2020	2021	2022	2023							
Mean yield (t/ha)	0.94	1.03		1.86								
InVigor® LT 4530P				117								
HyTTec® Trident	105	104		114								
HyTTec® Velocity				117								
Hyola® Defender CT				113								
InVigor® T 4510	106	102	Trial	112	Trial							
Renegade TT ^(b)			failed	114	failed							
HyTTec® Trophy	103	104		111								
InVigor® T 4511				101								
RGT Capacity TT		100		102								
SF Spark TT	100	99		98								
Sowing date	11 May	28 Apr	25 May	3 May	27 Apr							
Rainfall J-M (mm)	2	56	52	30	36							
Rainfall A-O (mm)	166	241	149	302	194							

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



Australian canola variety disease ratings

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

These ratings are updated twice a year by crop pathologists and were released in autumn 2024.

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

Table 10: Canol	a disease	e guide -	- 2024	autumn blackleg ratings and	resistance gro	oups.																			
	2024 Blackleg	2024 Blackleg	2024 Blackleg		Section A – resistance						Se	ection E	3 – resis	tance g	roup of	previou	ıs year's	cultiva	r (stubb	le)					
Variety	rating Bare	rating ILeVo®	rating Saltro®	Туре	group of cultivar	Α	В	С	AB	AC	AD	ABC	ABD	ABF	ABS	ABDF	ABDS	ADF	BF	ВС	Н	АН	ACH	ABH	ADFH
CONVENTIONAL VAR	RIETIES																								
Outlaw ^(b)	RMR			Open pollinated	А																				
Nuseed® Quartz	RMR			Hybrid	ABD																				
Nuseed® Diamond	RMR	R	R	Hybrid	ABF																				
TRIAZINE-TOLERANT	VARIETIES	;																							
HyTTec® Trifecta	R			Hybrid	ABD																				
HyTTec® Trident	R			Hybrid	AD																				
Monola® H524TT	R			High stability oil, hybrid	AD																				
DG Bidgee TT ^(b)	R	R	R	Open pollinated	Н																				
HyTTec® Trophy	R	R	R	Hybrid	AD																				
DG Torrens TT®	RMR			Open pollinated	Н																				
Hyola® Blazer TT	RMR		R	Hybrid	ADF																				
InVigor® T 4511	RMR	R		Hybrid	Different blac	kleg re	sistance	pattern	, further	testing	required	l. Effecti	ve rotati	on with	existing	groups	currently	unknov	wn						
Monola® H421TT	RMR			High stability oil, hybrid	ВС																				
ATR-Bluefin ^(b)	RMR			Open pollinated	AB																				
DG Avon TT ^(b)	MR	R	R	Open pollinated	AC																				
SF Spark™ TT	MR	R	R	Hybrid	ABDS																				
InVigor® T 4510	MR	R	R	Hybrid	BF																				
Renegade TT⊕	MR			Open pollinated	А																				
HyTTec® Velocity	MR			Hybrid	AB																				
Monola® 422TT	MRMS			Open pollinated	BC																				
ATR-Swordfish ^(b)	MRMS			Open pollinated	AB																				
SF Dynatron™ TT	MRMS	R	R	Hybrid	BC																				
RGT Baseline™ TT	MRMS	R	R	Hybrid	В																				
Bandit TT ^(b)	MRMS	R	R	Open pollinated	А																				
RGT Capacity™ TT	MRMS	RMR	R	Hybrid	В																				
AFP Cutubury ^(b)	MS	MR	RMR	Open pollinated	AB																				
ATR-Bonito ^(b)	MS	RMR	R	Open pollinated	А																				



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	2024	2024	2024		Section A -						S	ection B	– resis	tance gi	oup of	previou	s year's	cultiva	stubb	le)					
Variety	Blackleg rating Bare	Blackleg rating ILeVo®	Blackleg rating Saltro®	Туре	resistance group of cultivar	Α	В	С	AB	AC	AD	ABC	ABD	ABF	ABS	ABDF	ABDS	ADF	BF	ВС	Н	АН	ACH	АВН	ADFI
IMIDAZOLINONE-TOI	ERANT VA	RIETIES		21																					
Hyola® Continuum CL	R		R	Hybrid, Clearfield®	ADF																				
Hyola® Solstice CL	R		R	Hybrid, Clearfield®	ADFH																				
Captain CL	R			Winter, hybrid, Clearfield®	AH																				
Hyola® Feast CL	R		R	Winter, hybrid, Clearfield®	Н																				
RGT Nizza™ CL	R			Winter, hybrid, Clearfield®	В																				
Hyola® 970CL	R		R	Winter, hybrid, Clearfield®	Н																				
Phoenix CL	R			Winter, hybrid, Clearfield®	В																				
Pioneer® 45Y93 CL	R		R	Hybrid, Clearfield®	ВС																				
RGT Clavier™ CL	R			Winter, hybrid, Clearfield®	ACH																				
Pioneer® PN526C	RMR			High stability oil, Hybrid, Clearfield®	ABD																				
Pioneer® 45Y95 CL	RMR		R	Hybrid, Clearfield®	С																				
Nuseed® Ceres IMI	RMR			Hybrid	AD																				
Pioneer® 43Y92 CL	RMR		R	Hybrid, Clearfield®	В																				
Pioneer® 44Y94 CL	RMR		R	Hybrid, Clearfield®	ВС																				
Pioneer® PY421C	RMR		R	Hybrid, Clearfield®	А																				
VICTORY® V75-03CL	RMR			High stability oil, hybrid, Clearfield®	AB																				
IMIDAZOLINONE ANI	TRIAZINE	-TOLERAN	T VARIETII	ES																					
Hyola® Defender CT	R		R	Hybrid, Clearfield®, Triazine	ADF																				
Hyola® Enforcer CT	R			Hybrid, Clearfield®, Triazine	ADF																				
Pioneer® PY520 TC	MR		R	Hybrid, Clearfield®, Triazine	ВС																				
GLYPHOSATE-TOLER	ANT VARIE	TIES																							
DG Hotham TF	R			Hybrid, TruFlex®	ABH																				
Nuseed® Raptor TF	R			Hybrid, TruFlex®	AD																				
Nuseed® Eagle TF	R			Hybrid, TruFlex®	ABD																				
VICTORY® V55-04TF	R		R	High stability oil, hybrid, TruFlex®	AB																				
DG Lofty TF	R			Hybrid, TruFlex®	ABH																				
Nuseed® Hunter TF	RMR			Hybrid, TruFlex®	AB																				
Pioneer® 45Y28 RR	RMR		R	Hybrid, Roundup Ready®	BC																				
Pioneer® 44Y27 RR	RMR		R	Hybrid, Roundup Ready®	В																				
Pioneer® 44Y30 RR	RMR		R	Hybrid, Roundup Ready®	AB																				
Pioneer® PY422G	MR		R	Hybrid, Optimum GLY®	AB																				
Nuseed® Emu TF	MR			Hybrid, TruFlex®	AB																				
Pioneer® PY525G	MR		R	Hybrid, Optimum GLY®	AB																				



Continued on next page

Table 10: Canola	disease	guide ·	– 2024 a	autumn blackleg ratings and res	istance gro	oups (contin	ued).															
Variety	2024 Blackleg rating Bare	2024 Blackleg rating ILeVo®	rating	Туре	Section A – resistance group of cultivar	A	В	С	AB	AC	S:	ection E	3 – resis	stance g		s year's ABDS	(stubbl	e) BC	н	АН	ACH	АВН	ADFH
GLYPHOSATE-TOLER	ANT VARIE	TIES																					
InVigor® R 4022P	MRMS	R		Hybrid, TruFlex®	ABC																		
InVigor® R 4520P	MRMS	R		Hybrid, Truflex®	В																		
Pioneer® PY323G	MRMS		R	Hybrid, Optimum GLY®	ВС																		
GLYPHOSATE AND IM	IIDAZOLING	ONE-TOLE	RANT VAR	ETIES																			
Hyola® Regiment XC	R		R	Hybrid, TruFlex®, Clearfield®	ADFH																		
Hyola® Battalion XC	RMR			Hybrid, TruFlex®, Clearfield®	ADF																		
Hyola® Garrison XC	RMR		R	Hybrid, TruFlex®, Clearfield®	ADF																		
GLUFOSINATE AND T	RIAZINE-TO	OLERANT '	VARIETIES																				
InVigor® LT 4530P	RMR	R		Hybrid, LibertyLink®, Triazine	BF																		
GLUFOSINATE AND G	LYPHOSAT	E-TOLERA	NT VARIET	TIES																			
InVigor® LR 4540P	RMR	R		Hybrid, LibertyLink®, TruFlex®	В																		

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

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

Red = not advised (all resistance genes in common)

Please check updated ratings using the $\underline{\text{Blackleg Management Guide}}$ or the $\underline{\text{NVT Disease Ratings}}$.



CHICKPEA

Chickpea variety yield performance -Mallee South Australia and Victoria

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: Birchip	desi chic	kpea.			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.47	2.11	2.13		1.70
PBA Striker ^(b)	117	104	101		119
PBA Maiden [®]	106	101	99		117
PBA Slasher ^(b)	111	102	103	Trial	103
Ambar ^(b)	113			failed	
Neelam ^(b)	101	102	99		108
CBA Captain ^(b)	104	96	101		96
Sowing date	14 May	14 May	20 May	10 May	16 May
Rainfall J-M (mm)	14	101	25	60	23
Rainfall A-O (mm)	197	205	172	384	118

Special thanks to 2023 trial cooperator, Linc Lehmann. Learn more via the $\underline{\text{NVT Long Term Yield Reporter}}$

Table 2: Rainboy	v desi cl	nickpea.			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.32	1.57	1.42	1.73	2.31
PBA Striker®	111	104	106	107	108
PBA Maiden ^(b)	107	102	100	103	106
PBA Slasher ^(b)	102	100	107	103	101
Neelam ^(b)	103	102	98	103	102
CBA Captain ^(b)	104	99	105	93	104
Ambar ^(b)	98				
PBA Seamer®				92	
Sowing date	17 May	23 May	18 May	20 May	16 May
Rainfall J-M (mm)	22	88	51	76	33
Rainfall A-O (mm)	199	253	205	421	198

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



Table 3: Birchip	kabuli c	hickpea.			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.51	2.15	2.19		1.91
Genesis™ 090	97	100	103		94
PBA Magnus ^(b)	101	95	100		98
PBA Royal®	100	100	104	Trial	88
PBA Monarch®	95	100	97	failed	98
Almaz ^(b)	90	101			86
Genesis™ Kalkee	86	101	93		
Sowing date	14 May	14 May	20 May	10 May	16 May
Rainfall J-M (mm)	14	101	25	60	23
Rainfall A-O (mm)	197	205	172	384	118

Learn more via the NVT Long Term Yield Reporter

Table 4: Rainbow kabuli chickpea.										
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	1.42	1.47	1.31	1.37	2.18					
PBA Magnus ^(b)	104	99	101		106					
PBA Royal®	98	99	109	98	98					
PBA Monarch®	98	101	91	99	99					
Genesis™ 090	94	97	105	100	93					
Almaz ^{(b}	93	101		100	94					
Genesis™ Kalkee	94	103	79	99						
Sowing date	17 May	23 May	18 May	20 May	16 May					
Rainfall J-M (mm)	22	88	51	76	33					
Rainfall A-O (mm)	199	253	205	421	198					

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

Chickpea variety disease ratings - South Australia and Victoria

The following table contains varietal ratings for the predominant diseases of chickpea in South Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

V ariety	Ascochyta blight (pathogen group 1 – south)	2022-23 Phytophthora root rot	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN resistance (Pratylenchus thornei)
DESI				
CBA Captain ^{(b}	S	S	MR	MS
Genesis™ 836	S		MR	MS
Kyabra ^(†)	VS	VS	MRMS	S
Neelam ^(b)	S		MRMS	MS
PBA Boundary ⁽⁾	S	VS	RMR	MRMS
PBA Drummond ⁽⁾	VS	VS	MR	MRMS
PBA HatTrick ^{(h}	S	S	MRMS	MRMS
PBA Maiden ^{(b}	S		MRMS	MRMS
PBA Pistol ^(b)	S		RMR	MRMS
PBA Seamer ^{(b}	S	S	MRMS	MRMS
PBA Slasher ^(b)	S		MRMS	MRMS
PBA Striker ^(b)	S		MRMS	MRMS
KABULI				
Almaz ⁽¹⁾	S		MRMS	S
Genesis™ 090	MS		MRMS	MS
Genesis™ Kalkee	S		MRMS	MS
PBA Magnus ^(†)	S		MR	MSS
PBA Monarch ^(†)	S		MRMS	MS
PBA Royal ^(b)	MS		MR	MS

Learn more via the NVT Disease Ratings.

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



FABA BEAN

Faba bean variety yield performance – Mallee South Australia and Victoria

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: Lamero	o faba be	ean.			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.97			4.67	
PBA Zahra ^(b)	100			108	
PBA Amberley®	96			105	
PBA Samira ^(b)	96		<u>.</u>	104	lai
PBA Bendoc ^{(b*}	104	.	ed tr	101	ed tr
Farah ^{(b}	88	Trial failed	omis	100	omis
Fiesta VF	86	lalica	Compromised tria	98	Compromised trial
Nura ^(b)	94		의	96	
PBA Marne®	80			96	
PBA Rana ^(b)	82			91	
Sowing date	11 May	28 Apr	25 May	16 May	4 May
Rainfall J-M (mm)	2	56	52	30	37
Rainfall A-O (mm)	166	241	149	302	201

Special thanks to 2023 trial cooperator, Andy Hunt.

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



^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Faba bean variety disease ratings - South Australia and Victoria

The following table contains varietal ratings for the predominant diseases of faba bean in South Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 2: Faba bean	disease guide for So	outh Australia and Vi	ctoria.		
Variety	Ascochyta blight	Cercospora leaf spot	Chocolate spot (Botrytis)	RLN resistance (Pratylenchus thornei)	Leaf rust
Cairo	VS	S	S	MSS	S
Doza	VS	S	S	MSS	MR
Farah ^(b)	MS	S	S	MS	VS
FBA Ayla ⁽¹⁾		S	S	MRMS	MR
Fiesta VF	S	S	S	MS	VS
Nura ^(b)	MR (P)	S	MS	MS	VS
PBA Amberley ^(b)	MR	S	MRMS	MRMS	VS
PBA Bendoc ^(b)	MR	S	S	MRMS	VS
PBA Marne ^(b)	MS	S	MS (P)	MS	MRMS
PBA Nanu ^(b)		S	S	MRMS	MR
PBA Nasma ^(b)	S	S	S	MSS	MRMS
PBA Rana ^(b)	MRMS (P)	S	MS	MS	VS
PBA Samira ^(b)	MR (P)	S	MS	MRMS	S
PBA Warda ^(b)	S	S	S	MRMS	MRMS
PBA Zahra ^(b)	MRMS	S	MS	MRMS	S

Learn more via the NVT Disease Ratings.

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



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 ^(b)	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.



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: Birchip 1	field pea				
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.79	2.76	2.83		2.79
PBA Butler ^(b)	112		108		111
APB Bondi ^(b)		107	106		109
PBA Taylor ^(b)	110	105	105		104
PBA Pearl	106	105	101		107
Kaspa	103	102	105	Trial	106
PBA Noosa®	106	100	101	failed	107
PBA Gunyah ^(b)	98		101		96
PBA Wharton ^(b)	99	97	96		89
PBA Oura ^(b)	91	98	95		90
PBA Percy	85	99	96		93
Sowing date	14 May	14 May	20 May	10 May	16 May
Rainfall J-M (mm)	14	101	25	60	23
Rainfall A-O (mm)	197	205	172	384	118

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

Table 2: Lamero	oo field p	ea.			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.21		1.62	3.94	2.01
PBA Pearl	155		100	110	110
PBA Butler®	113		104	110	109
APB Bondi ^(b)			105	106	113
PBA Taylor ^{(b}	90		106	103	107
PBA Noosa ^(b)	126	Trial	97	101	103
Kaspa	88	failed	100	102	99
PBA Percy	97		98	104	93
PBA Gunyah ^(b)	71		103	98	98
PBA Oura ^(b)	85		102	98	97
PBA Wharton ^(b)	71		105	91	100
Sowing date	21 May	18 May	3 June	16 May	4 May
Rainfall J–M (mm)	2	56	52	30	37
Rainfall A–O (mm)	166	241	149	302	201

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

Table 3: Ouyen field pea.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)		2.07		3.37	2.11	
APB Bondi ^(b)		109		118	114	
PBA Butler ^(b)				115	111	
PBA Taylor ^(b)		104		110	111	
PBA Pearl		109	Compromised tria	111	102	
PBA Noosa ^(b)	No trial	103		106	102	
Kaspa	INO UIdi	98		104	104	
PBA Gunyah ^(b)				96	101	
PBA Wharton ^(b)		99		94	101	
PBA Oura®		97		90	94	
PBA Percy		95		88	88	
Sowing date		12 May	25 May	10 May	12 May	
Rainfall J-M (mm)		50	25	89	41	
Rainfall A-O (mm)		277	157	387	196	

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

Table 4: Rainbow field pea.						
Year	2019	2019 2020 2021		2022	2023	
Mean yield (t/ha)	2.58	1.15	2.62	3.19	2.91	
PBA Butler ^(b)	113		110	109	109	
APB Bondi ^(b)		104	111	112	109	
PBA Taylor ^(b)	109	117	110	102	105	
PBA Pearl	102	88	98	119	108	
Kaspa	106	102	106	96	101	
PBA Gunyah ^(b)	104		102	92	98	
PBA Noosa ^(b)	97	78	102	107	103	
PBA Wharton ^(b)	97	118	99	93	95	
PBA Oura ^(b)	98	116	93	95	96	
PBA Percy	100	109	89	96	97	
Sowing date	17 May	22 May	18 May	20 May	16 May	
Rainfall J–M (mm)	22	88	51	76	33	
Rainfall A-O (mm)	199	253	205	421	198	

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



Table 5: Ultima field pea.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	0.74	1.09	1.49		1.78	
PBA Pearl	116	147	98		104	
APB Bondi ^(b)		105	110		112	
PBA Butler®	103		110		113	
PBA Noosa ^(b)	100	107	101		104	
PBA Taylor ^(b)	105	86	109	Trial	108	
PBA Percy	98	118	91	failed	92	
PBA Oura ^(b)	105	110	93		91	
Kaspa	89	76	107		106	
PBA Wharton ^(b)	107	90	99		94	
PBA Gunyah ^(b)	97		102		99	
Sowing date	8 May	11 May	11 May	10 May	19 May	
Rainfall J–M (mm)	18	47	29	63	34	
Rainfall A-O (mm)	161	233	199	453	209	

Special thanks to 2023 trial cooperator, Warrick Grey. Learn more via the $\underline{\text{NVT Long Term Yield Reporter}}$

Field pea variety disease ratings - South Australia and Victoria

The following table contains varietal ratings for the predominant diseases of field pea in South Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 6: Field pea disease guide for South Australia and Victoria.							
Variety	Bacterial blight	Downy mildew	Powdery mildew	RLN resistance (Pratylenchus neglectus)	RLN resistance (<i>Pratylenchus thornei</i>)		
APB Bondi ^(b)	S	RMR (S)	RMR	RMR	MSS		
GIA Kastar ^{(b}	S	S	RMR	MR	MS		
GIA Ourstar®	S (P)	S	S	MRMS	MS		
Kaspa	S	S	S	RMR	MRMS		
PBA Butler®	MS	S	S	RMR	MRMS		
PBA Gunyah ^(b)	S	S	S	RMR	MRMS		
PBA Noosa ^(b)	S	MS	S	RMR	MRMS		
PBA Oura®	MS	S	S	MR	MRMS		
PBA Pearl	MS	S	S	MR	MRMS		
PBA Percy	MRMS	S	S	RMR	RMR		
PBA Taylor ^(b)	S	S	S	RMR	MRMS		
PBA Twilight [₼]	S	S	S	MR	MRMS		
PBA Wharton ^(b)	S	S	RMR	MR	MRMS		
Sturt	MS	S	S	MR	MR		

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

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



LENTIL

New lentil varieties

The following information is for lentil varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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
ALB Terrier ^(b)	Agriculture Victoria		ALB Terrier ⁶ is an imidazolinone herbicide tolerant, small market class red lentil with mid-flowering and maturity characteristics. It is rated RMR to pathotype two of Asochyta, which is the best in its class. It is broadly adapted to various lentil growing regions of Australia.

^{*} EPR amount is ex-GST, 🕫 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.



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: Birchip lentil.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	2.43	2.21	2.79			
GIA Lightning ^{()*}		105	110			
GIA Thunder ^{(h*}		111	106			
ALB Terrier®			102		Compromised trial	
PBA Ace ^(b)	109	102	107			
GIA Leader ^{()*}	102	105	99	Trial		
PBA Hurricane XT ⁽⁾ *	100	100	99	failed		
PBA Jumbo2 ^(b)	99	99	99		Com	
PBA Bolt ^(b)	99	92	102			
PBA HighlandXT ^{(b)*}	98	95	100			
PBA Hallmark XT ^{()*}	93	98	94			
Sowing date	14 May	14 May	20 May	10 May	16 May	
Rainfall J-M (mm)	14	101	25	60	23	
Rainfall A-O (mm)	197	205	172	384	118	

Special thanks to 2023 trial cooperator, Linc Lehmann.

Table 2: Lameroo lentil.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	0.38			3.30	1.48	
ALB Terrier®				119	100	
GIA Thunder ^{(b*}			Compromised trial	117	110	
PBA Jumbo2 ^(b)	68			111	109	
PBA Hallmark XT ^{(b*}	127			109	95	
GIA Leader®*	106	Trial		105	92	
PBA Hurricane XT ^{(1)*}	99	failed		100	97	
PBA HighlandXT ^{(b*}	91			95	107	
PBA Kelpie XT ^{(b*}	66			95	110	
Nipper ^(b)	109			97	91	
GIA Lightning ^{()*}				89	105	
Sowing date	21 May	18 May	3 Jun	16 May	4 May	
Rainfall J–M (mm)	2	56	52	30	37	
Rainfall A–O (mm)	166	241	149	302	201	

Special thanks to 2023 trial cooperator, Flohr & Co, Panlatinga.

2019	2020	2021	2022	
			2022	2023
			2.75	1.69
			109	106
			108	105
	No trial		103	102
		Compromised trial		100
			102	99
NO IIIdi			100	102
				99
			98	98
			93	97
			93	96
		25 May	10 May	12 May
		25	89	41
		157	387	196
	No trial	No trial No trial	25 May 25 157	No trial No

Special thanks to 2023 trial cooperator, Scott Anderson.

Table 4: Rainbow lentil.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.70	1.43		2.81	2.31	
GIA Thunder ^{(b*}		118		133	107	
ALB Terrier ^(b)				129	107	
PBA Jumbo2 ^(b)	108	92		124	101	
GIA Lightning()*		122	Compromised tria	89	104	
GIA Leader®*	96	91	iised		103	
PBA Hallmark XT ^{(1)*}	95	97	orom	104	98	
PBA HighlandXT ^{(b)*}	103	101	Com	95	98	
PBA Hurricane XT ^{(1)*}	98	91			100	
PBA Kelpie XT ^{(b)*}	104	74		105	96	
PBA Ace ^(b)	98	90		82	103	
Sowing date	17 May	22 May	18 May	20 May	16 May	
Rainfall J–M (mm)	22	88	51	76	33	
Rainfall A–O (mm)	199	253	205	421	198	

Special thanks to 2023 trial cooperator, Brett Fisher.



^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

^{*} herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 5: Ultima lentil.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)		1.41		3.84	1.52	
GIA Thunder®*		107		130	111	
ALB Terrier®				126	114	
PBA Jumbo2 ^(b)		91	Compromised trial	121	95	
GIA Leader ^{()*}	Compromised trial	91			109	
GIA Lightning ^{(l)*}	nisec	118		94	109	
PBA Hurricane XT ^{(1)*}	prom	93			102	
PBA Hallmark XT ^{(1)*}	Com	98		99	96	
PBA Ace ^(b)		92		92	110	
PBA HighlandXT ^{()*}		103		95	91	
PBA Kelpie XT ^{(b*}		81		104	82	
Sowing date	8 May	11 May	11 May	10 May	19 May	
Rainfall J–M (mm)	18	47	29	63	34	
Rainfall A–O (mm)	161	233	199	453	209	

Lentil variety disease ratings - South Australia and Victoria

The following table contains varietal ratings for the predominant diseases of lentil in South Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 6: Lentil disease guide for South Australia and Victoria.								
Variety	Ascochyta blight (Pathotype 2 PBA Hurricane XT ⁽⁾ virulent)	Ascochyta blight (Pathotype 1 Nipper ⁽⁾ virulent)	Botrytis grey mould	RLN resistance (Pratylenchus neglectus)	RLN resistance (<i>Pratylenchus thornei</i>)			
ALB Terrier®	MR (P)	R	MRMS (P)	MR	MR			
GIA Leader ^(b)	MR (P)	MR (P)	MRMS (P)	MRMS (P)	MR (P)			
GIA Lightning ^(b)	MRMS (P)	R (P)	MS (P)	MRMS (P)	MR (P)			
GIA Metro®	RMR (P)	MR (P)	MRMS (P)	MR (P)	MRMS (P)			
GIA Sire ^(b)	MRMS (P)	R (P)	MS (P)	MRMS (P)	MRMS (P)			
GIA Thunder ^(b)	MRMS (P)	R (P)	MRMS (P)	MR (P)	MR (P)			
Nipper ^(b)	MR	MRMS	MRMS	RMR	MR			
PBA Ace®	MR	R	MS	MR	MRMS			
PBA Bolt ^(b)	MRMS	MR	S	MR	MR			
PBA Hallmark XT ^(b)	MRMS	RMR	MRMS	MR	MRMS			
PBA HighlandXT [♠]	MR (P)	MR	MS	MR	MRMS			
PBA Hurricane XT ^(b)	MRMS (P)	RMR	MS	MRMS	MRMS			
PBA Jumbo2 ^(b)	RMR	R	MR (P)	MR	MRMS			
PBA KelpieXT ^{⟨⟩}	MRMS	MRMS	MS	MRMS	MRMS			



Special thanks to 2023 trial cooperator, Warrick Grey.

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

Learn more via the NVT Disease Ratings.

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

LUPIN

New Iupin 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 ^(b)	Australian Grain Technologies	4.50	A very high and stable yielding alternative to PBA Jurien ^(b) and Mandelup ^(b) . 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 ^(b) . Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly quicker maturity relative to PBA Jurien ^(b) , slightly slower than Mandelup ^(b) .
Rosemont ^(t)	Australian Grain Technologies	4.50	A very high yielding alternative to PBA Jurien ^(a) , Coyote ^(b) and Mandelup ^(b) . 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 ^(b) . Taller plant height, may improve harvestability. Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly slower maturity relative to PBA Jurien ^(b) , slightly quicker than Coyote ^(b) .

^{*} 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.



Lupin variety yield performance - Mallee South Australia and Victoria

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: Hopetoun narrow-leaf lupin.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.65	1.52	2.07	3.02	1.85	
PBA Bateman ^(b)	125	114	103	106	120	
PBA Gunyidi ^(b)	120	112		106	118	
Jenabillup ^(b)	114	113		108	115	
PBA Barlock ^(b)	110	114	98	110	111	
Coyote ^(b)		104	109	98	113	
PBA Jurien ^(b)	109	110		108	106	
Quilinock	107	109	98	107		
Lawler ^(b)		98	107	98		
Mandelup ^(b)	101	101	102	101	100	
Wonga	95	108	83	106	109	
Sowing date	26 Apr	24 Apr	25 May	5 May	24 Apr	
Rainfall J-M (mm)	27	87	31	43	30	
Rainfall A-O (mm)	135	225	168	360	161	

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

Table 2: Lameroo narrow-leaf lupin.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)		2.05		3.83	0.93	
PBA Jurien [®]		105		112	99	
PBA Barlock ^(b)		108		107	102	
PBA Bateman ^(b)	Trial failed	107	Trial failed	103	120	
PBA Gunyidi ^(b)		106		101	117	
Jenabillup ^(b)		107		102	110	
Rosemont ^(b)				107	105	
Coyote ^(b)		101		101	123	
Lawler ^(b)		98		103	104	
Mandelup ^(b)		100		103	98	
Gidgee ^(b)				105	89	
Sowing date	21 May	28 Apr	25 May	12 May	19 May	
Rainfall J–M (mm)	2	56	52	30	36	
Rainfall A-O (mm)	166	241	149	302	194	

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

Table 3: Walpeup narrow-leaf lupin.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	0.88	1.46	1.40	3.82		
PBA Barlock ^(b)	120	96	93	112		
PBA Jurien®	111	99	94	111	Trial results below standard	
Jenabillup ^(b)	121	93		109		
PBA Bateman ^(b)	123	92	98	108		
Quilinock	113	97	96	108		
PBA Gunyidi ^(b)	121	92	98	107		
Wonga	117	93	96	103		
Mandelup ^(b)	100	101	99	102		
Rosemont ^(b)				101		
Coyote ^(b)		96	104	99		
Sowing date	8 May	28 Apr	25 May	5 May	27 Apr	
Rainfall J-M (mm)	9	85	54	86	55	
Rainfall A-O (mm)	118	247	189	444	228	

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



Lupin variety disease ratings - South Australia and Victoria

The following table contains varietal ratings for the predominant diseases of lupin in South Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 4: Lupin disease guide for South Australia and Victoria.						
Variety	Anthracnose resistance	Cucumber mosaic virus (CMV)	Phomopsis pod infection	Phomopsis stem infection	Sclerotinia stem rot	
Coromup ^(b)	MR	MR	MS	MR	S (P)	
Coyote ^(b)	MRMS	MRMS	MRMS	S	S (P)	
Gidgee ^(b)	RMR	MRMS	S (P)	MR	S (P)	
Jenabillup ^(b)	MS	MRMS	MR	MS	S (P)	
Lawler ^(b)	MR	MRMS	MS	MR	S (P)	
Mandelup ^(b)	MRMS	MRMS	S	MR	S (P)	
PBA Barlock ^(b)	RMR	MRMS	MR	MR	S (P)	
PBA Bateman ^(b)	MRMS	MR	MS	RMR	S (P)	
PBA Gunyidi ^(b)	MRMS	MRMS	MRMS	RMR	S (P)	
PBA Jurien ^(b)	RMR	MS	MRMS	RMR	S (P)	
PBA Leeman ^(b)	MRMS	MRMS	MRMS	MR	S (P)	
Rosemont ^(b)	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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