NVT HARVEST REPORT



MARCH 2024

Eyre Peninsula Southern Region

nvt.grdc.com.au





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

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LEGEND: MEAN VARIETY YIELD PERFORMANCE

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

DISEASE RATING COLOUR RANGE

	svs s	MSS	MS	MRMS	MR	RMR	R
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Disease severity scale from very susceptible (VS) to resistant (R)

The disease ratings in the report are current at the time of publication. Regularly visit <u>nvt.grdc.com.au/nvt-disease-ratings</u> to find the latest NVT disease ratings.

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



INTRODUCTION

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

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

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

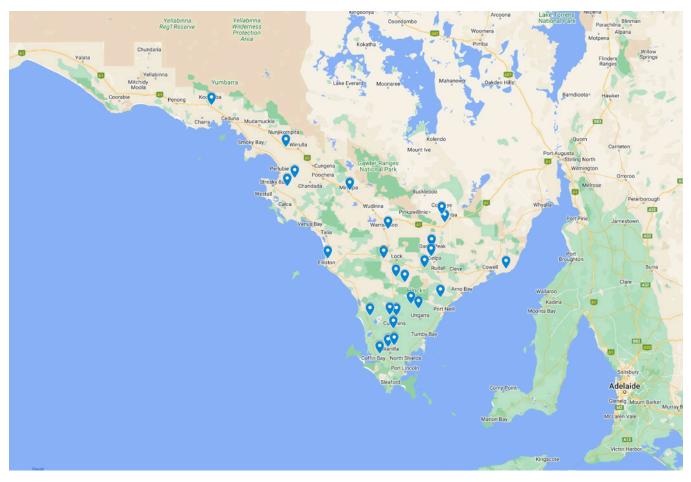
Refer to the latest *Crop Sowing Guide* for further information at **nvt.grdc.com.au/resources/crop-sowing-guides**



NVT SITE LOCATIONS – Eyre Peninsula

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

SOURCE: NVT Online



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



WHEAT

New wheat varieties

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

Variety	Breeding company	Grain classification	End point royalty* (\$)	Comments supplied by breeding company ¹
Dozer ^{(b} CL Plus	InterGrain		TBC	Variety description not supplied.
Genie [¢]	InterGrain		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 ⁽⁾	LongReach Plant Breeders		TBC	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	LongReach Plant Breeders		TBC	Variety description not supplied.
Soaker ⁽⁾	LongReach Plant Breeders		3.50	Mid-maturity derived from Scepter ^(b) 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		4.15	Scepter ^d -type Clearfield [®] variety with increased yield over Scepter ^d . The highest-yielding Clearfield [®] wheat variety in WA, South Australia and Victoria. Tolerant to Clearfield [®] Intervix [®] herbicide. Similar disease resistance profile to Scepter ^d . Similar grain size and test weight as Scepter ^d . Mid-season maturity, similar to Scepter ^d . APW quality classification in South Australia, Victoria, southern NSW, classification for WA pending.

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



BARLEY

OAT

CANOLA

FABA BEAN

FIELD PEA

LENTIL

LUPIN

Wheat variety yield performance – Eyre Peninsula

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: Cummins main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	5.85	4.54	5.17		6.11	
Tomahawk CL Plus®*					118	
Vixen®	123	122	106		106	
Kingston [®]		123	103		104	
LRPB Matador®					109	
Scepter®	105	114	111		111	
Soaker®					110	
Sunmaster®			106		110	
Brumby [⊕]			110	Trial failed	112	
Ballista ^(b)	109	115	105	lanca	108	
RockStar ^(b)	103	116	105		109	
Calibre		112	110		111	
Sunblade CL Plus ^{(b*}		111	104		107	
Boree®		112	105		106	
Dozer [⊕] CL Plus*					103	
Denison®			109		110	
Sowing date	16 May	05 May	24 May	19 May	12 May	
Rainfall J–M (mm)	3	41	54	147	33	
Rainfall A–O (mm)	307	366	327	386	268	

Special thanks to 2023 trial cooperator. K Modra & SC Modra.

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

Table 3: Minnipa main season wheat.					
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.78	1.72	2.65	4.48	1.41
Vixen®	118	103	110	119	107
LRPB Matador®				113	113
Ballista ^{(b}	114	109	109	114	109
Tomahawk CL Plus®				107	120
RockStar⊕	106	113	108	113	110
Calibre®		111	115	105	116
Dozer ^{(b} CL Plus*			106		105
Brumby ^{(b}			111	107	114
Boree®		107	107	108	108
Genie®					98
Sunblade CL Plus ^{(b*}		106	104	108	105
Scepter	101	104	111	103	112
Soaker®					110
Catapult [®]	96	107	107	102	109
Sunmaster®			102	104	104
Sowing date	8 May	12 May	27 May	5 May	23 May
Rainfall J–M (mm)	5	77	44	89	38
Rainfall A–O (mm)	216	218	210	300	168

Special thanks to 2023 trial cooperator, Minnipa Agricultural Centre.

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

Table 2: Kimba main season wheat

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.32	2.23	2.90	5.91	4.00
Tomahawk CL Plus®				103	122
Vixen®	143	108	134	112	110
LRPB Matador [®]				110	113
Calibre®		117	126	104	116
Ballista ^(b)	136	114	121	111	111
RockStar ^(b)	113	112	111	113	111
Brumby [®]			115	106	114
Dozer [™] CL Plus*			116		106
Scepter	119	107	120	102	113
Boree ^(b)		107	115	107	108
Sunblade CL Plus ^{(b*}		109	105	107	108
Soaker®					111
Catapult [®]	104	105	108	103	108
Genie					100
Razor CL Plus ^{(b*}	132	102	122	93	107
Sowing date	2 May	4 May	26 May	10 May	3 May
Rainfall J–M (mm)	8	55	57	235	47
Rainfall A–O (mm)	132	253	226	265	161

Special thanks to 2023 trial cooperator, Cliff Farms Kimba.

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

Table 4: Mitchellville main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.03	2.00		3.80	2.73	
Reilly®				112	119	
Ballista ^(b)	116	112		105	116	
Genie					110	
Calibre [®]		117		101	112	
Dozer ^{(b} CL Plus*					106	
Vixen®	139	106		92	115	
RockStar ^(b)	95	111		109	102	
Sunblade CL Plus ^{(b*}		111	Trial failed	100	111	
LRPB Matador [®]			lanea	99	107	
LRPB Major®					99	
Cosmick [®]	104	103		101	108	
Boree®		106		101	100	
Emu Rock ^(b)	128	94		89	111	
LRPB Dual®				102	102	
Brumby [®]				96	98	
Sowing date	8 May	11 May	8 Jun	9 May	5 May	
Rainfall J–M (mm)	2	60	45	174	74	
Rainfall A–O (mm)	99	215	122	226	159	

Special thanks to 2023 trial cooperator. The Kaden family.

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

OAT



Table 5: Nunjikompita main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.08	1.01	1.23	3.35	0.65	
Calibre®		106	116	103	121	
RockStar ^(b)	110	111	104	112	103	
LRPB Matador®				107	111	
Ballista ^(b)	115	107	108	107	112	
Tomahawk CL Plus®*				101	119	
Brumby [®]			108	107	107	
Vixen®	115	101	107	105	109	
Dozer [⊕] CL Plus*			103		103	
Boree ^(b)		105	105	106	104	
Scepter	112	101	109	102	110	
Catapult [®]	106	104	105	105	102	
Sunblade CL Plus®*		105	102	105	106	
Genie®					96	
LRPB Major®					101	
Soaker®					106	
Sowing date	14 May	18 May	7 Jun	10 May	18 May	
Rainfall J–M (mm)	11	46	44	88	29	
Rainfall A–O (mm)	165	256	183	253	154	

Special thanks to 2023 trial cooperator, Rule Family Trust.

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

Table 7: Piednippie main season wheat.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	2.28	0.87	2.62	4.06	1.36	
Tomahawk CL Plus®*				107	111	
Calibre		109	116	106	106	
LRPB Matador®				108	103	
RockStar [®]	111	106	109	112	103	
Brumby ^{(b}			112	110	106	
Ballista ^{(b}	114	107	107	108	103	
Vixen®	116	109	108	105	101	
Boree		106	109	107	102	
Scepter	107	104	111	105	106	
Dozer ⁽⁾ CL Plus*			107		99	
Catapult [®]	105	103	110	106	103	
Soaker®					106	
Sunblade CL Plus ^{(b*}		101	100	106	104	
Sheriff CL Plus®	101	102	106	104	100	
LRPB Major [®]					100	
Sowing date	7 May	18 May	26 May	6 May	19 May	
Rainfall J–M (mm)	7	31	67	144	16	
Rainfall A–O (mm)	273	240	289	384	195	

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

Table 6. Penong main season wheat

Table 6: Penong main season wheat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	0.43		0.52	2.31	0.70		
Vixen®	100		141	109	121		
Ballista ^(b)	108		120	110	119		
LRPB Matador®				105	124		
Calibre®			122	103	131		
Reilly®				110	103		
Dozer [⊕] CL Plus*			115		111		
RockStar ^(b)	108		98	106	112		
Tomahawk CL Plus ^{(b*}		Trial failed		95	136		
Genie ^(b)		lanea			92		
Boree ^(b)			109	102	113		
Sunblade CL Plus ^{(b*}			100	105	107		
Emu Rock [®]	95		129	100	103		
Razor CL Plus ^{(b*}	89		132	95	119		
Brumby [®]			102	99	118		
Scepter	92		115	96	120		
Sowing date	3 May	15 May	31 May	29 Apr	5 May		
Rainfall J–M (mm)	6	50	53	5	35		
Rainfall A–O (mm)	138	225	167	331	123		

Special thanks to 2023 trial cooperator, CG & AL Drummond Pty Ltd. * herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 8: Rudall main season wheat.					
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.77	2.60	5.67	
Tomahawk CL Plus ^{(b*}				108	
Calibre [®]		115	127	109	
Brumby [®]			120	110	
RockStar [⊕]		110	113	112	
LRPB Matador [®]				108	
Denison®	lei		115	110	iei
Scepter	Compromised tria	112	121	105	Compromised trial
Ballista ⁽)	omis	109	116	108	omis
Devil®	mpr	109	114	107	mpr
Sunmaster [®]	ଁ		110	108	ଥ
Sunblade CL Plus⊕*		106	110	108	
Catapult ^(b)		108	111	106	
Boree ^(b)		107	111	106	
Vixen®]	107	116	103	
Cutlass ^(b)		103	101	108	
Sowing date	15 May	11 May	27 May	24 May	15 May
Rainfall J–M (mm)	4	33	49	159	36
Rainfall A–O (mm)	216	264	254	294	152

Special thanks to 2023 trial cooperator, Matthew, Mignon & Harry Dunn. * herbicide-tolerant variety. Learn more via the <u>NVT Long Term Yield Reporter</u>

OAT

LENTIL

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		5.47		6.00	5.09
Kingston ^(b)		124		107	107
Tomahawk CL Plus ^{(b*}				105	115
Vixen®		119		108	108
Sunmaster®				104	105
LRPB Matador				106	108
Soaker®			lal		109
Scepter]	109	ed tr	103	109
Ballista ^(b)	Trial failed	109	Compromised trial	107	104
Brumby	lalleu			105	108
RockStar ^(b)		107		107	105
Sunblade CL Plus ^{(b*}]	109		105	103
Dozer ^{(b} CL Plus*]				103
Boree]	105		104	105
Calibre]	100		105	106
Denison®	1			103	107
Sowing date	17 May	12 May	21 Jun	16 May	17 May
Rainfall J–M (mm)	5	62	55	139	52
Rainfall A–O (mm)	346	397	450	470	329

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

Table 11: Minnip	a early s	eason w	heat.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.99	3.94	4.63	2.14
IGW6755					104
Stockade ^(b)]			119	98
Genie®					116
LRPB Major®					115
RockStar [⊕]		99	103	112	111
Denison®]	104	108	103	113
Valiant [®] CL Plus*			106	109	108
DS Bennett [®]	Trial failed	114	97	117	81
Cutlass®	lanea	101	103	104	105
Catapult [®]		102	103	97	113
lllabo ^(b)		105	102	104	92
Longsword®		109	106	90	99
Brumby ^{(b}					110
EG Titanium		91	96	100	97
DS Pascal®		91	93	103	93
Sowing date	12 Apr	15 Apr	20 Apr	19 Apr	19 Apr
Rainfall J–M (mm)	5	77	44	89	38
Rainfall A–O (mm)	216	218	210	300	168
Irrigation A–O (mm)			20		

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

Table 10: Warran	nboo ma	ain seaso	on whea	t.	
Year	2019	2020	2021	2022	
Mean yield (t/ha)	1.88	1.05	3.42	5.75	
Tomahawk CL Plus®				118	
Vixen®	124	145	107	112	

Rainfall A–O (mm)	257	223	162	263	120
Rainfall J–M (mm)	4	42	42	69	30
Sowing date	7 May	18 May	27 May	26 May	4 May
Catapult [®]	99	107	106	105	
Sunmaster ^{(b}			111	109	
LRPB Anvil ^{(b} CL Plus*		131	107	101	
Sunblade CL Plus®*		97	107	108	
Boree ^(b)		118	105	106	
RockStar [®]	109	108	107	109	ଥ
Razor CL Plus ^{(b*}	108	129	108	105	mpre
Devil®	109	120	107	108	Compromised tria
Brumby [®]			111	110	ed tr
Scepter ^(b)	105	118	112	110	ia
Ballista®	119	125	107	110	
Calibre®		131	112	110	
LRPB Matador®				111	
Vixen®	124	145	107	112	
Iomahawk CL Plus ^{(1)*}				118	

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

Wheat variety quality – Eyre Peninsula

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 Eyre Peninsula 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 nine NVT sites in Eyre Peninsula in 2022.

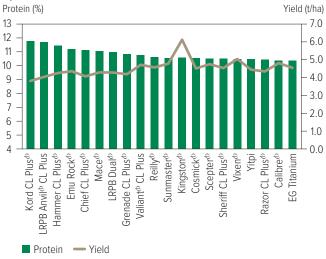


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2022.

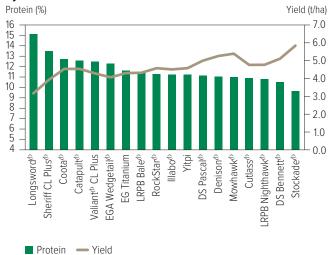


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from eight NVT sites in Eyre Peninsula in 2023.

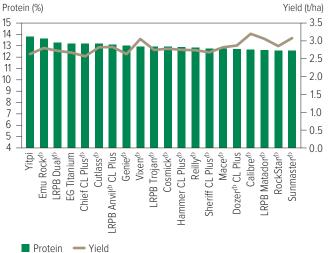
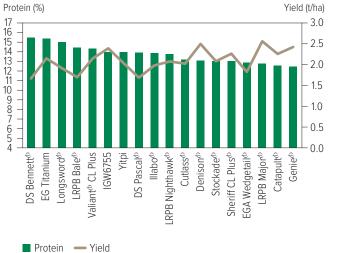


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2023.



LUPIN

BARLEY



Test weight comparisons

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

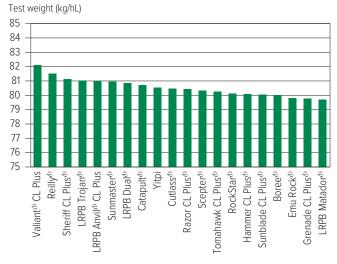


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2022.

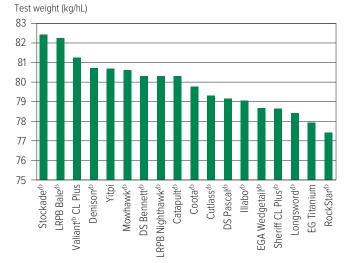
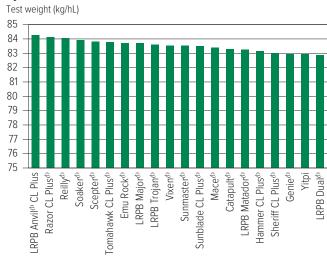
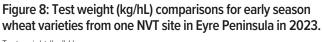
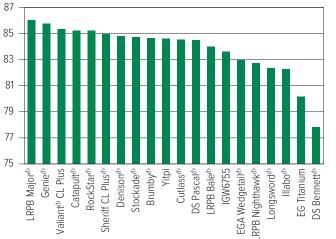


Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from eight NVT sites in Eyre Peninsula in 2023.





Test weight (kg/hL)

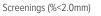


OAT

FIELD PEA

Screenings comparisons

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



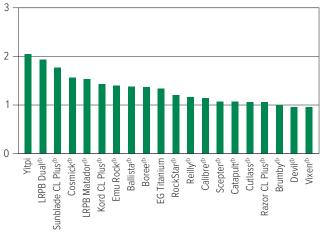


Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2022.

Screenings (%<2.0mm)

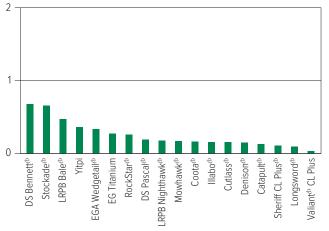


Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from eight NVT sites in Eyre Peninsula in 2023.

Screenings (%<2.0mm)

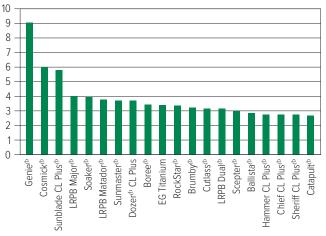
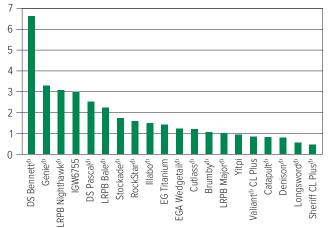


Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2023.

Screenings (%<2.0mm)



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Wheat variety disease ratings – South Australia

The following tables contain varietal ratings for the predominant diseases of wheat in South Australia. These ratings are updated annually by crop pathologists and were released in March 2024. Selected varieties of most relevance to South Australian growers are listed in alphabetical order and

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

 Table 12: Wheat disease guide for South Australia.

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Variety	Stem rust	Stripe rust (east coast resistanc	Leaf rust	Septoria tritici blotch	Yellow leaf spot	Powdery mildew	RLN resistance (Pratylenchus negleo	RLN resistance (Pratylenchus thorne	CCN	Eyespot	Crown rot	Black point*
Anapurna	MSS	RMR	MS	MRMS	MRMS	RMR	MS	S (P)	MRMS		SVS	
Ascot ^(b)	MRMS	MSS	RMR	S	MRMS	S	S	S	MR	S	S	
Ballista ^{(b}	MR	MSS	S	SVS	MS	SVS	S	MRMS	MRMS	S	S	
Beckom ^(b)	MRMS	MRMS	MSS	S	MSS	MSS	S	MSS	R		S	
BigRed ^(b)	S	RMR	MRMS	MR	MR	RMR	MS	MS	S		MSS	
Boree®	MR	SVS	S	SVS	MRMS	SVS	S	MSS	MSS		S	
Borlaug 100 ^(b)	MR	SVS	MR	MSS	MRMS	S	S	MS	MS	MSS (P)	MSS	
Brumby [®]	MR	MS	SVS	S	MRMS	MR/S	MRMS	MS (P)	MRMS	S	S	
Calibre®	MR	S	S	S	MRMS	MSS	S	MSS	MRMS	S	S	
Catapult [®]	MR	S	S	MSS	MRMS	S	S	MS	R	S	MSS	
Chief CL Plus ^(b)	MR	SVS	MR	S	MRMS	SVS	MRMS	MSS	MS	MSS	MSS	
Coolah®	MR	MSS	RMR	MSS	MSS	S	S	MS	S		MSS	
Coota®	RMR	S	MR	S	MSS	S	MR	MS	MR	S	MSS	
Cosmick®	MS	MSS	SVS	SVS	MRMS	MSS	MSS	MSS	S		S	
Cutlass ^(b)	R	MSS	RMR	MSS	MSS	MSS	MSS	MSS	MR		S	
Denison®	MS	S	S	MSS	MRMS	S	S	S	MS	S	MSS	
Devil®	S	SVS	SVS	SVS	MRMS	S	MSS	S	MSS	S	MSS	
Dozer ^(b) CL Plus	MS	S	MSS	S (P)	MS	S	MRMS	S	MS (P)	SVS (P)	S	
DS Bennett ^(b)	MS	S	SVS	MSS	MRMS	R	S	S	S		VS	
DS Pascal®	MSS	MRMS	MRMS#	MSS	MS	RMR	S	S	S		S	
EG Jet ^(b)	S	MRMS	S	MSS	MRMS	SVS	S	S	MRMS		S	
EG Titanium	MS	MR	MS	MSS	MSS	S	MSS	MSS	R	S	MSS	
EGA Wedgetail®	MRMS	MS	MSS	MSS	MSS	MSS	S	VS	S		S	
Einstein	S	RMR	S	MSS	MR		MRMS	S	S		S (P)	
Emu Rock [®]	MS	SVS	SVS	S	MS	MSS	MSS	S	S		MSS	
Genie ^(b)	MS (P)	MRMS (P)	S (P)	S (P)	MRMS (P)	SVS (P)						
Hammer CL Plus®	MR	MS	S	MSS	MRMS	S	MSS	S	MRMS	S	MSS	
Hyperno®	RMR	MR	RMR	MSS	MRMS	MS	MS	RMR	MS		SVS	
IGW6755	MRMS	MSS	MS	MSS	MRMS	S	MSS	MR	MSS	MSS (P)	S	
Illaboth	MRMS	MRMS	S	MSS	MS	R	MSS	MSS	MRMS	S	S	
Jandaroi ^{(b}	MRMS	MRMS	MR	MSS	MRMS	S	MS	MRMS	MS		VS	
Jillaroo®	MS	MSS	S	S	MS	SVS	S	MS (P)	MS	S	S	
Kingston®	S	MSS	S	S	MSS	S	S	MRMS	R	S	S	
Longford	RMR	RMR	RMR	MRMS/S	MRMS	RMR	S	S	MS	MSS (P)	MSS	
Longsword®	MR	MRMS/MS	MS	MS	MRMS	S	MRMS	MRMS	MRMS	S	MSS	
LRPB Anvil® CL Plus	MR	S	SVS	VS	MSS	SVS	MSS	S	MS	S	MSS	

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Table 12: Wheat	t disease	guide fo	r South A	Australia (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 thornei)	ccn	Eyespot	Crown rot	Black point*
LRPB Avenger ^(b)	MS	S	S	S	MS	SVS	MSS	MRMS	MRMS	S	S	
LRPB Bale ^(b)	MRMS	MRMS	MSS	MSS	SVS	MS	S	S	R	S	S	
LRPB Beaufort®	SVS	RMR	MSS	S	MRMS	RMR	MS	MSS	MS	Ŭ	S	
LRPB Dual [®]	MRMS	MS	MSS	MSS	S	S	MSS	MSS	R	S	S	
LRPB Havoc ^(b)	S	MSS	S	MSS	MRMS	S	S	MSS	S		MSS	
LRPB Impala ^{(b}	MR	MRMS	SVS	SVS	MSS	R	SVS	S	MSS		MSS	
· ·									S	c		
LRPB Kittyhawk®	MRMS (S)	MR	MR MD#	MRMS	MRMS	MS	S	S		S S (D)	SVS	
LRPB Major [®]	MRMS	MRMS	MR#	MSS	MS	MS	MSS	MSS	MRMS (P)	S (P)	S	
	MS	MS	MSS	S (P)	MRMS	MS	S	MRMS	MS (P)	S (P)	S	
LRPB Nighthawk®	RMR	MR	MSS	MS	MS	SVS	MSS	MS	MS	6	MSS	
LRPB Oryx ^(b)	MR	MS	RMR#	SVS	MSS	MR	MSS	MSS	S	S	MSS	
LRPB Raider®	RMR	MR	RMR	S	MSS	S	MSS	MS	S	-	S	
LRPB Scotch®	MSS	MRMS	MR#	S	MRMS	MR	MS	S	MS	S	S	
LRPB Scout [®]	MRMS	MS	MS	S	SVS	MRMS	S	MSS	R		S	
LRPB Trojan®	MRMS	S	MR#	S	MSS	S	MSS	MSS	MS	MS	MS	
Mace®	MRMS	SVS	S	SVS	MRMS	MSS	MS	MS	MRMS	S	S	
Manning⊕	MR	RMR	MSS	MRMS/S	MRMS	MS	MSS	S	S	MS (P)	VS	
Naparoo®	MRMS	MRMS	MS	S	MRMS	R	SVS	S			S	
Razor CL Plus [⊕]	MRMS	MRMS	S	SVS	MSS	MSS	S	MS	MR	S	S	
Reilly®	MRMS	MS	MSS	S	S	MSS	MS	MSS	R	S	S	
RGT Accroc ^(b)	MS	RMR	SVS	MS	MRMS	MSS	MS	MSS	S	MSS (P)	SVS	
RGT Calabro	MS	RMR	MSS	MRMS	MR	RMR	S	MS	S		SVS	
RGT Cesario®	RMR	RMR	RMR	MRMS	MR	RMR	MRMS	MSS	MSS (P)		VS	
RGT Waugh®	MS	RMR	S	MRMS#	MRMS	R	MSS	MSS	MS		S	
RGT Zanzibar	VS	MR	SVS	MSS	MS	RMR	S	MS (P)	MSS		S	
RockStar ⁽)	MRMS	S	S	S	MRMS	SVS	MRMS	MS	MSS	S	S	
Saintly®	MS	MRMS	RMR	MRMS/S	MRMS	S	MS	RMR	MS		VS (P)	
Scepter	MRMS	MSS	MSS	S	MRMS	SVS	S	MSS	MRMS	S	MSS	
Severn [®]	MS	RMR	MRMS	MSS	MRMS	RMR	S	MRMS	MSS (P)		S	
Sheriff CL Plus [®]	MS	SVS	SVS	S	MRMS	SVS	MRMS	MRMS	MS	S	S	
Soaker®	MR (P)	MS (P)	S (P)	S (P)	MS (P)	S (P)		-				
SQP Revenue®	RMR	MR	VS	MSS	MRMS	R	S	S	S	S	S	
Sting ^(b)	MRMS	S	SVS	SVS	MRMS	SVS	MS	MS	MS		MSS	
Stockade®	MS	MR	MR	MS	MRMS	SVS	S	MSS	MRMS		S	
Sunblade CL Plus®	MS	MRMS	MSS	S	MSS	S S	MSS	MRMS	MSS		S	1
Sunflex ^(b)	MR	MRMS	RMR#	SVS	MS	S	S	MSS	MS		MSS	
Sunmaster ^{(b}		MRMS	RIVIR#	S S	MSS	MSS	MRMS		MSS		MSS	
	MS							MS				
Sunprime [®]	MS	MS	MR#	S (D)	MSS	MSS	S	S	MDMS (D)	C (D)	MSS	
Tomahawk CL Plus	MR	MSS	S	S (P)	MRMS	SVS	S	MS	MRMS (P)	S (P)	S	
Valiant ^(b) CL Plus	MR	S	S	MSS	MRMS	VS	S	S (P)	MSS (P)	MSS	MSS	
Vixen [®]	MRMS	SVS	SVS	S	MRMS	SVS	MRMS	MS	MSS	S	S	
Willaura [®]	MR	S	MRMS	S	MS	SVS	MSS	MRMS	MS		S	
Yitpi	S	MS	S	S	SVS	MS	MSS	S	MR		S	
Zen®	S	S	S	S	MRMS	MS	MRMS	S	S		S	

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Table 12: Wheat	Table 12: Wheat disease guide for South Australia (continued).											
Variety	Stem rust	Stripe rust (east coast resistance)	Leaf rust	Septoria tritici blotch	Yellow leaf spot	Powdery mildew	RLN resistance (Praty/enchus neg/ectus)	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	
DBA Bindaroi®	MR	MS	MR	MS	MS	MSS	MRMS	MR	MS		SVS	
DBA Lillaroi [®]	RMR	MS	RMR	S	MRMS	MS	MRMS	RMR	S		SVS	
DBA Mataroi®	MRMS	MS	MR	MSS	MRMS	S	MS	RMR	MRMS		SVS	
DBA Spes	R	MS	RMR	S	MRMS	S	MRMS	RMR	MS		VS	
DBA Vittaroi®	MR	MS	RMR	MSS	MRMS	MS	MS	MR	S		SVS	
DBA-Artemis®	MR	MRMS	RMR	MRMS/S	MRMS	SVS	MS	MR	MS		SVS	
DBA-Aurora®	RMR	MRMS	RMR	MRMS/S	MRMS	MSS	MRMS	RMR	MSS		SVS	
Patron®	RMR	MRMS	MR#	MRMS	MRMS	MSS	MRMS	MR	S		SVS	
Westcourt [⊕]	RMR	MR	RMR	S	MRMS	S	MS	MR	MSS		VS	

* ratings will be updated when available. Learn more via the <u>NVT Disease Ratings</u>.
 R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible,
 (P) = provisional rating, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes, () show outlier.





New barley varieties

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

Variety	Breeding company	Grain classification	End point royalty* (\$)	Comments supplied by breeding company ¹
Neo [®] CL	InterGrain	Under malt evaluation	4.25	Neo ⁶ CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to medium- high rainfall environments. Neo ⁶ 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 ⁶ 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 ⁶ CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025.
Spinnaker®	Secobra Recherches		TBC	Released under code name SCA21-Y003.

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

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



Barley variety yield performance – Eyre Peninsula

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: Cummins main season barley.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)		4.18	5.31		6.22				
Neo ^{(b} CL*				_	125				
Cyclops ^(b)		126	108		119				
Minotaur®		127	104		117				
Maximus [®] CL*		121	108		115				
Laperouse ^(b)		118	103		119				
Yeti [®]	lei	112	106		117				
Combat [₯]	Compromised trial		109		110				
Rosalind [®]	omis	116	109	Trial failed	107				
Spartacus CL ^{(b*}	mpre	111	108		105				
Spinnaker®	ଥ				100				
La Trobe®		102	108		97				
RGT Planet®		110	101		96				
Beast ^(b)		86	107		105				
Zena ^{(b} CL*			100		95				
Fandaga®			95		98				
Sowing date	16 May	5 May	24 May	19 May	12 May				
Rainfall J–M (mm)	3	41	54	147	33				
Rainfall A–O (mm)	307	366	327	386	268				

Special thanks to 2023 trial cooperator, Stuart Modra.

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

Table 3: Elliston main season barley.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	3.65	2.22	4.35	6.85	3.74				
Neo ^{(b} CL*					112				
Rosalind [⊕]	107	116	105	112	111				
Combat [®]				109	109				
Yeti	107	116	111	102	108				
Spinnaker®				115	106				
Cyclops ^(b)		108	111	104	104				
Minotaur®		105	108	109	103				
Beast®	111	119	108	95	111				
Leabrook ^(b)	111	114	106	96	110				
RGT Planet [⊕]	100	100	95	116	104				
Maximus [®] CL*	103	113	110	100	105				
Zena ^{(b} CL*				114	103				
Compass®	110	114	105	90	109				
Fathom ^{(b}	106	110	103	96	106				
Laperouse®	103	105	111	97	100				
Sowing date	14 May	12 May	28 May	11 May	16 May				
Rainfall J–M (mm)	3	19	64	60	17				
Rainfall A–O (mm)	282	310	269	398	298				

Special thanks to 2023 trial cooperator, NM & DS May.

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

Table 2: Darke P	eak mai	n seasoi	ı barley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.45	1.83	2.24	7.16	1.75
Neo ^{(b} CL*					106
Leabrook	131	129	133	103	121
Beast®	136	132	135	98	127
Combat ^(b)				111	120
Yeti ^(b)	131	136	136	97	122
Cyclops®		121	126	102	119
Titan AX ^{(b*}			131	102	114
Compass®	130	128	134	98	120
Laperouse®	132	125	131	97	113
Commodus [⊕] CL*		124	130	97	117
Minotaur®		116	115	107	109
Maximus [®] CL*	129	125	125	90	122
Rosalind [®]	111	114	107	103	118
Fathom®	120	110	113	96	117
Spinnaker [®]				112	101
Sowing date	16 May	19 May	1 Jun	26 May	26 May
Rainfall J–M (mm)	6	89	51	215	41
Rainfall A–O (mm)	190	273	227	315	191

Special thanks to 2023 trial cooperator, DM Kenny Nominees.

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

Table 4: Minnipa	main se	eason ba	irley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.93	2.20	3.07	4.56	1.86
Neo ^{(b} CL*					108
Yeti®	122	107	116	106	112
Combat ^(b)				110	112
Rosalind [₯]	120	107	113	104	113
Beast ^(b)	126	110	118	94	118
Cyclops ^(b)		105	109	111	108
Leabrook ^(b)	120	110	115	99	115
Minotaur®		104	106	117	104
Maximus ^{(b} CL*	120	104	112	99	110
Laperouse®	110	102	107	108	103
Compass®	119	109	114	90	114
Spinnaker®				110	104
Titan AX [®]			107	99	108
Commodus ^(b) CL*		107	111	90	111
Fathom ^(b)	115	105	109	90	111
Sowing date	8 May	12 May	27 May	5 May	23 May
Rainfall J–M (mm)	5	77	44	89	38
Rainfall A–O (mm)	216	218	210	300	168

Special thanks to 2023 trial cooperator, SARDI.

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

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Table 5: Piednippie main season barley. var 2010 2020 2021 2021							
Veer	2010	2020	2024	201			

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.90		3.17	4.93	1.88
Neo ^{(b} CL*					105
Combat ^(b)				111	115
Rosalind [⊕]	107		108	109	111
Cyclops [®]			113	106	110
Spinnaker®				116	102
Minotaur®		la	109	112	104
Beast	114	Compromised tria	111	92	119
RGT Planet®	98	omis	99	117	97
Leabrook ^(b)	112	mpr	110	94	117
Yeti®	105	୍ଷ	109	99	111
Zena ^{(b} CL*				114	96
Maximus ^{(b} CL*	104		107	97	109
Fathom ^(b)	111		105	93	112
Titan AX ^{(b*}			109	92	112
Laperouse®	99		108	99	105
Sowing date	7 May	18 May	26 May	6 May	19 May
Rainfall J–M (mm)	7	31	67	144	16
Rainfall A–O (mm)	273	240	289	384	195

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

Table 7: Wharminda main season barley.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.12	1.39		5.76	2.08			
Combat ^(b)				110	132			
Titan AX [⊕] *				99	141			
Leabrook®	141	117		100	128			
Neo ^(b) CL*					108			
Compass®	150	118		96	125			
Beast	150	114	la	98	119			
Cyclops ^(b)		105	Compromised tria	104	124			
Commodus ^{(b} CL*		116	omis	95	122			
Minotaur®		105	mpr	106	111			
Yeti [®]	127	115	ଁ	99	105			
Laperouse ^(b)	109	113		98	117			
Fathom ^(b)	133	101		98	109			
Commander	91	107		95	130			
Rosalind [⊕]	117	97		106	90			
Spinnaker ^{(b}				110	94			
Sowing date	16 May	19 Jun	28 May	13 May	11 May			
Rainfall J–M (mm)	5	40	53	141	23			
Rainfall A–O (mm)	180	247	228	282	192			

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

Table 6: Wanilla main season barley.

Tuble 0. Walling Hall Season balley.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)		4.57	5.46	5.88	5.80			
Neo ^{(b} CL*					116			
Combat [⊕]			112	111	114			
Minotaur®		119	105	109	111			
Cyclops [⊕]		116	106	106	115			
Rosalind [®]		113	105	107	112			
Spinnaker [®]]			111	104			
RGT Planet®		108	108	110	100			
Yeti [®]	Trial failed	113	97	102	113			
Maximus ^{(b} CL*	lanea	115	98	98	113			
Laperouse®		113	98	100	110			
Zena ^{(b} CL*			106	108	99			
Fandaga ^(b)			106	108	96			
Spartacus CL ^{(b*}		106	99	96	108			
La Trobe®		97	103	96	106			
Beast ^(b)		95	97	99	109			
Sowing date	16 May	12 May	24 May	16 May	17 May			
Rainfall J–M (mm)	5	62	55	139	52			
Rainfall A–O (mm)	346	397	450	470	329			

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

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Barley variety quality – Eyre Peninsula

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 Eyre Peninsula 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

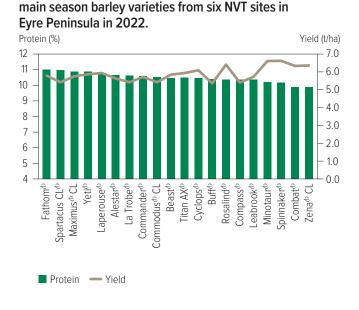
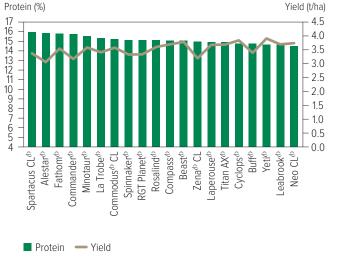


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from seven NVT sites in Evre Peninsula in 2023.



Test weight comparisons

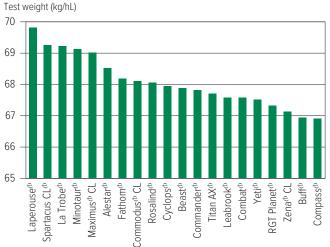
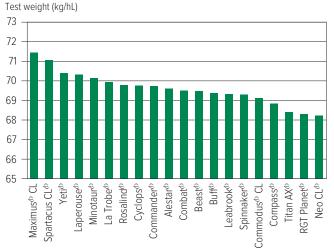


Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from six NVT sites in Eyre Peninsula in 2022.

Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.



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Screenings comparisons

Figure 5: Screenings (<2.2mm) comparisons for main season barley varieties from six NVT sites in Eyre Peninsula in 2022.

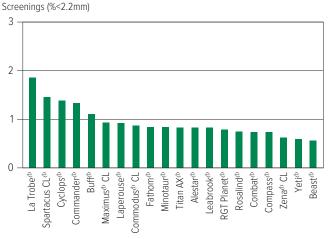
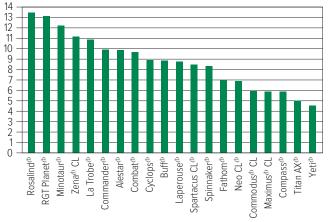


Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.

Screenings (%<2.2mm)



Retention comparisons

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

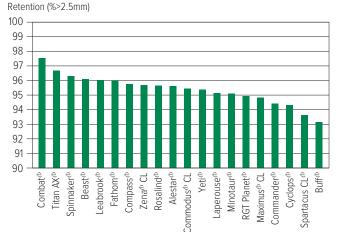
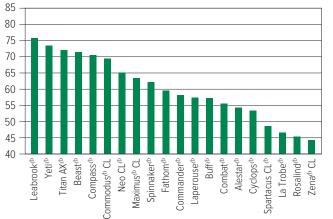


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.

Retention (%>2.5mm)



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Barley variety disease ratings – South Australia

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

Table 8: Barley dis	sease guide fo	or South	Australia	•							
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®	MSS		S	SVS	SVS	MR	MR	R^ (P)	S		MR
Banks [®]	MRMS		S	MS-SVS	VS	MS	MR	S	MSS		MS
Bass [®]	S		MSS	MSS	VS	MS	MRMS	S	MSS		S
Beast®	MS		MS	SVS	SVS	MRMS	MRMS	MR	S		S
Bottler®	MSS		MSS	SVS	SVS	MS	RMR		SVS		RMR
Buff®	SVS		MSS	MS-VS	SVS	MRMS	MS		S		S
Combat [®]	SVS		RMR	MS-S	SVS	MRMS	MS	MR	S		MS
Commander [®]	MSS		MSS	SVS	SVS	MRMS	MRMS	R	S		MSS
Commodus [®] CL	S		MSS	MSS-SVS	SVS	MRMS	MRMS	R	S		MSS
Compass®	S		MS	MSS-SVS	SVS	MRMS	MR	R	MSS		S
Cyclops ^{(b}	S		MSS	S	SVS	MRMS	MRMS	S	MSS		SVS
Fairview®	S		S	SVS	SVS	MR	MR		MSS		R
Fandaga [®]	MSS		S	SVS	VS	MR	MR	R	MSS		R
Fathom [®]	MSS		RMR	R-S	SVS	MRMS	MR	R	SVS		MRMS
Flinders®	S		S	MSS-SVS	SVS	MRMS	MR	S	MSS		RMR
Keel	S		MR	MS-SVS	SVS	MS	MRMS	R	S		S
Kiwi	MSS		MSS	SVS	VS	MRMS	RMR	S	MSS		RMR
La Trobe®	S		S	R-SVS	SVS	MRMS	MRMS	R	S		MSS
Laperouse [®]	S		MRMS	SVS	VS	MRMS	MR	S	S		MSS
Leabrook [®]	S		MS	MRMS-SVS	VS	MRMS	RMR	RMR	S		S
Litmus [®]	S		S	VS	VS	MS	MRMS	MS	S		MS
Maximus [®] CL	S		MS	R-SVS	VS	MRMS	MRMS	R	S		S
Minotaur®	SVS		S	VS	SVS	MRMS	MRMS	R	MSS		S
Neo ^(b) CL	MSS (P)		MR (P)	S (P)	SVS (P)	RMR (P)	MR (P)	R			RMR (P)
RGT Planet®	S		SVS	R-SVS	SVS	MRMS	MR	R (P)	MSS		RMR
Rosalind₫	MSS		S	MR-S	VS	MRMS	MRMS	R	S		MSS
SakuraStar	MSS		MS	MS-SVS	SVS	MR	MR	R	S		MSS
Scope CL [®]	S		MSS	MRMS-SVS	SVS	MRMS	MRMS	S	S		MRMS
Spartacus CL [®]	MSS		S	R-SVS	VS	MRMS	MRMS	R	S		MSS
Spinnaker ^{(b}	S		SVS	S	VS	MR	MS	S	S		RMR
Titan AX®	SVS		MS	VS	VS	MR	MR	MR (P)	S		MSS
Topstart	S		S	S	SVS	RMR	RMR	S	MSS		RMR
Urambie	S		S	R-S	VS	MRMS	MR		MSS		MS
Westminster [®]	MS		S	R-S	SVS	MRMS	MS		MSS		RMR
Yeti®	SVS		MS	VS	VS	MR	MR	RMR	S		S
Zena [®] CL	S		S	R-S	VS	MRMS	MR	R	S		RMR

* ratings will be updated when available. Learn more via the <u>NVT Disease Ratings</u>.
 R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible,
 T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant,

(P) = provisional rating, - hyphen indicates a range, ^ line contains a few susceptible off types.



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Oat variety yield performance – Eyre Peninsula

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: Nunjikompita oat.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		1.07		2.56			
Koala ^{(b}		101		143			
Bannister ^{(b}]	100		123			
13008-18				118			
Williams®		100	Compromised trial	108	Trial failed		
Koorabup®	No trial	99		100			
Yallara ^{(b}	No trial	99		97			
Possum		100		94			
Bilby₫]	100	01	90			
Kowari [®]]	100		82			
Mitika [®]		100		80			
Sowing date		19 May	7 Jun	10 May	18 May		
Rainfall J–M (mm)		46	44	88	29		
Rainfall A–O (mm)		256	183	253	154		

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

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



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Oat variety disease ratings – South Australia

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

Table 2: Oat disease guide for South Australia.									
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®			MSS (P)		VS (P)	I (P)	MRMS (P)	MSS (P)	SVS (P)
Bannister ^{(b}			MS	MR	MRMS	MT	MSS	S	MSS-SVS
Bilby®			S	S	S	MI	S	SVS	MS
Brusher ^(b)			S	MR	S	MT	MSS	SVS	MS
Carrolup			SVS	VS	S	I	MSS	MSS	SVS
Durack [®]			S	MRMS	S	MT	S	S	SVS
Echidna			MSS	MS	MRMS	MT	SVS	S	MSS
Goldie			MS	MR	S	I	MS	S	SVS
Kingbale ^(b)			MS	R	MR	MT	MSS	MSS (P)	S (P)
Koala®			MSS	R	MS	MT	MSS	S	S
Kojonup ^{(b}			MS	VS	MS	MT	MSS	SVS	S
Kowari®			S	S	S	I	S	S	S
Kultarr®			MSS (P)		S (P)	MI (P)	MS (P)	MS (P)	S (P)
Mitika [®]			SVS	VS	S	MT	SVS	S	SVS
Mulgara ^{(b}			MSS	R	MR	MT	S/MS	MSS	SVS
Tungoo			MSS	MR	R	MT	MRMS#	S	MRMS
Wallaby®			MS (P)		S (P)	MI (P)	MS (P)	MSS (P)	SVS (P)
Wandering			MSS	VS	S	MT	MSS	S	S
Williams ^(b)			MSS	S	S	MI	MSS	MSS	MS
Wintaroo			MS	R	MR	MT	MS#	S	S
Yallara ^{(b}			S	R	MS	MI	MSS	S	SVS

 * ratings will be updated when available. Learn more via the $\underline{\text{NVT Disease Ratings}}.$

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. BARLEY WHEAT



CANOLA

New canola varieties

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

Variety	Breeding company	End point royalty* (\$)	Comments supplied by breeding company ¹
DG Avon TT®	Nutrien Ag Solutions Ltd	TBC	Early, determinant, short TT open pollinated variety suited to low-medium rainfall zones.
DG Drummond TF	Nutrien Ag Solutions Ltd	N/A	DG Drummond TF is a tall, mid-late maturing, glyphosate-tolerant hybrid with group H blackleg resistance. DG Drummond TF is suited to medium to high-rainfall areas.
Hyola® Continuum CL	Advanta Seeds	N/A	An early-mid maturity Clearfield [®] hybrid, Continuum CL provides wide environmental adaptability with excellent grain oil potential. It exhibits strong yields in target environments and demonstrates excellent adaptability to growing regions with a range of 1.0–5.5 t/ha. Continuum CL showcases an exceptionally high level of early plant vigour, high lodging resistance, and an outstanding blackleg rating of 'R' due to its distinctive tri-group resistance, ADF.
Hyola® Defender CT	Advanta Seeds	N/A	A mid-season maturity CT hybrid, Defender CT delivers remarkable grain yield, robust plant vigour and a very high grain oil content. Defender CT performance is closely aligned with the renowned Hyola® Blazer TT variety. Defender CT offers uniform flowering, manageable height for direct harvesting and an exceptional blackleg rating of 'R' due to its distinctive tri-group resistance, ADF.
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		Variety description not supplied.
PY421C	Pioneer Hi-Bred Aust		Variety description not supplied.
PY422G	Pioneer Hi-Bred Aust		Variety description not supplied.
PY424GC	Pioneer Hi-Bred Aust		Variety description not supplied.
PY525G	Pioneer Hi-Bred Aust		Variety description not supplied.

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

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



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Canola variety yield performance – Eyre Peninsula

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: Yeelanna med-high rainfall GLY.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)			1.97		3.83		
InVigor [®] LR 4540P					114		
Nuseed [®] Hunter TF					111		
Nuseed® Emu TF			121		108		
Pioneer® 44Y27 (RR)			116	Compromised trial	108		
PY323G					108		
InVigor [®] R 4520P	No trial	No trial	112 No trial		110		
Pioneer [®] 44Y30 RR		11	113		108		
Nuseed [®] Raptor TF			110		104		
InVigor [®] R 4022P			107		104		
Hyola® Regiment XC			110		102		
Sowing date			24 May	2 May	27 Apr		
Rainfall J–M (mm)			62	173	36		
Rainfall A–O (mm)			339	382	288		

Table 2: Lock low-med rainfall GLY.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)				4.23			
InVigor [®] LR 4540P				111			
Nuseed [®] Hunter TF				110			
InVigor [®] R 4520P				109			
Pioneer® 44Y27 (RR)			l tria	107	Compromised trial		
Pioneer® 44Y30 RR	No trial	Comprovement of the second sec	lisec	105			
Nuseed [®] Raptor TF	NO UIDI		prom	105	pron		
InVigor [®] R 4022P			Com	104	Com		
DG Lofty TF				97			
Hyola [®] Battalion XC				96			
Nuseed® Emu TF				94			
Sowing date			24 May	6 May	1 May		
Rainfall J–M (mm)			45	116	36		
Rainfall A–O (mm)			233	331	216		
Special thanks to 2023 tria	cooperator. C	J Kav & Sons.					

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

Table 3: Mt Hope med-high rainfall IMI.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		2.13	1.98	2.88	3.30		
PY421C				128	112		
Pioneer® 44Y94 CL		112	118	122	112		
Pioneer® 45Y95 (CL)			112	115	111		
Hyola® Continuum CL				111	107		
Pioneer® 45Y93 CL	No trial	109			102		
Hyola® Solstice CL			116	93	111		
Pioneer® 43Y92 (CL)					104		
Hyola® Equinox CL]	100	108	88			
VICTORY® V75-03CL					93		
PY520TC					92		
Sowing date		3 May	24 May	2 May	28 Apr		
Rainfall J–M (mm)		23	64	110	37		
Rainfall A–O (mm)		327	435	395	317		

Special thanks to 2023 trial cooperator, JM & EJ Doudle.

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® Defender CT and Hyola® Enforcer CT. Learn more via the <u>NVT Long Term Yield Reporter</u> Special thanks to 2023 trial cooperator, CJ Kay & Sons. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 4: Yeelanna med-high rainfall IMI.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	2.66	1.72	1.77		3.60		
PY421C					116		
Hyola [®] Solstice CL			129		111		
Pioneer® 44Y94 CL	110	112	121		115		
Pioneer® 45Y95 (CL)	112		116	Compromised trial	112		
Nuseed [®] Ceres IMI			125				
Hyola® Continuum CL				prom	108		
Pioneer® 43Y92 (CL)				Com	105		
Pioneer® 45Y93 CL	109	104			102		
VICTORY® V75-03CL	90				91		
PY520TC					88		
Sowing date	7 May	4 May	24 May	2 May	27 Apr		
Rainfall J–M (mm)	6	41	62	173	36		
Rainfall A–O (mm)	346	330	339	382	288		

Special thanks to 2023 trial cooperator, Westbrooke Ag.

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

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lable 5: Lock low-med rainfall IMI.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.37	1.38		4.50				
Pioneer® 44Y94 CL				110				
Pioneer® 44Y90 (CL)	112	105						
Saintly CL	80		ial		ial			
Hyola® Continuum CL			Compromised trial	96	Compromised tria			
Nuseed [®] Ceres IMI			omis	93	omis			
Pioneer® 43Y92 (CL)	90	94	mpro	98	mpre			
Hyola® 575CL	107		ଥ		ଥ			
VICTORY® V7002CL	66							
Hyola® Equinox CL				88				
Sowing date	7 May	30 Apr	24 May	6 May	1 May			
Rainfall J–M (mm)	3	45	45	116	36			
Rainfall A–O (mm)	198	252	233	331	216			

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Special thanks to 2023 trial cooperator, CJ Kay & Sons.

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

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

Table 7: Mt Hope med-high rainfall TT. 2019 1.81 Renegade TT^(b) 98 124 98 Hyola® Blazer TT 109 114 117 111 InVigor® T 4510 114 116 108 114 InVigor® LT 4530P 115 102 112 HyTTec® Trophy 104 112 No trial HyTTec® Trifecta 107 114 111 112 RGT Capacity TT 103 113 104 Hyola® Defender CT 118 107 InVigor® T 4511 112 109 107 PY520TC 109 113 108 Sowing date 3 May 24 May 2 May 28 Apr Rainfall J-M (mm) 23 64 110 37 Rainfall A-O (mm) 327 435 395 317

Special thanks to 2023 trial cooperator, JM & EJ Doudle.

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

Table 6: Minnipa low-med rainfall IMI

Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.07		1.41	1.52	1.05			
PY421C					114			
Pioneer® 44Y94 CL				113	100			
Pioneer® 44Y90 (CL)	108							
Hyola® Continuum CL		Trial		102	102			
Hyola [®] 575CL	96	results						
Hyola [®] Equinox CL		below		93				
Pioneer® 43Y92 (CL)	100	standard	102	99	94			
Saintly CL	103							
Nuseed [®] Ceres IMI				94	113			
Hyola [®] Solstice CL					96			
Sowing date	2 May	8 May	24 May	22 Apr	28 Apr			
Rainfall J–M (mm)	5	77	44	89	38			
Rainfall A–O (mm)	216	218	210	300	166			

Special thanks to 2023 trial cooperator, Minnipa Agricultural Centre.

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® Defender CT and Hyola® Enforcer CT. Learn more via the <u>NVT Long Term Yield Reporter</u>

Year 2019 2020 2021 2022 2023									
Mean yield (t/ha)	2.42	1.82	2.21	2022	3.20				
HyTTec® Trifecta	113	114	116		113				
HyTTec® Trophy	108	110	119		115				
Hyola® Blazer TT		111	113	Compromised trial	113				
InVigor® T 4510	107	111	116		112				
InVigor® T 4511			113		110				
PY520TC			108		109				
InVigor [®] LT 4530P			108		107				
RGT Capacity TT			104		106				
Hyola® Defender CT					109				
Renegade TT [®]				1	104				
Sowing date	6 May	4 May	24 May	2 May	27 Apr				
Rainfall J–M (mm)	6	41	62	173	36				
Rainfall A–O (mm)	346	330	339	382	288				

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

Table 9: Lock low-med rainfall TT.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.28	1.20		3.80			
InVigor [®] LT 4530P				115			
HyTTec [®] Velocity				107			
HyTTec® Trident	94	128		114			
InVigor [®] T 4510	102	120	Compromised tria	112	Compromised tria		
Renegade TT ^(b)			lised	105	lised		
Hyola® Defender CT			pron	107	pron		
HyTTec [®] Trophy	100	118	Com	109	Com		
RGT Capacity TT				99			
InVigor® T 4511				104			
SF Spark TT	93	105		100			
Sowing date	7 May	30 Apr	24 May	6 May	1 May		
Rainfall J–M (mm)	3	45	45	116	36		
Rainfall A–O (mm)	198	252	233	331	216		

Special thanks to 2023 trial cooperator, CJ Kay & Sons. Learn more via the NVT Long Term Yield Reporter

Table 10: Minnipa low-med rainfall TT.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)	1.11		1.09	1.56	0.79		
Hyola® Blazer TT					108		
Hyola® Defender CT				112	102		
HyTTec [®] Velocity				104	132		
HyTTec® Trident			115	105	110		
HyTTec [®] Trophy	104	Trial	113	106	107		
InVigor [®] LT 4530P		failed		110	100		
InVigor® T 4510	104		105	105	107		
Renegade TT®			94	109	107		
RGT Capacity TT				101	110		
Hyola [®] Enforcer CT	103			103	92		
Sowing date	2 May	8 May	24 May	22 Apr	28 Apr		

77

218

44

210

89

300

38

166

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

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Rainfall J-M (mm)

Rainfall A–O (mm)



Australian canola variety disease ratings

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

These ratings are updated twice a year by crop pathologists and were released in autumn 2024. Varieties are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

		2024 autumn blackleg ra	ating	
		Fluopyram	Pydiflumetofen	
/ariety	Bare	(e.g. ILeVO®)	(e.g. Saltro®)	Туре
ONVENTIONAL VARIETIES				
RIAZINE-TOLERANT VARIETIES				
	The out	mn 2024 blackleg	i discaso ratingo i	vill bo
		this report when t		
	The mos	t recent published	ratings are availa	ible
	using the	e <u>Blackleg Manage</u>	ement Guide or th	e
		ease Ratings tool.		
				1
IDAZOLINONE-TOLERANT VARIETI	IES			

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



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Table 11: Canola disease guide – autumn 2024 ratings (continued).							
	20	24 autumn blackleg rati					
Variety	Bare	Fluopyram (e.g. ILeVO®)	Pydiflumetofen (e.g. Saltro®)	Туре			
		((
IMIDAZOLINONE AND TRIAZINE-TOLE	RANT VARIETIES						
GLYPHOSATE-TOLERANT VARIETIES							
			oaco ratingo will	ha			
		024 blackleg dis report when they	-				
		ent published rati					
		kleg Manageme					
	NVT Disease						
GLYPHOSATE AND IMIDAZOLINONE-TO	OLERANT VARIETI <u>ES</u>						
GLUFOSINATE AND TRIAZINE-TOLERA							
OLOFOSINATE AND TRIAZINE-TOLERA							

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

WHEAT

BARLEY

FABA BEAN

Faba bean variety yield performance – Eyre Peninsula

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: Yeelanna faba bean.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		3.80	4.18	4.55	5.62		
PBA Zahra®		100	105	100	98		
PBA Marne®		83	100	105	106		
PBA Samira®		99	99	101	98		
PBA Bendoc ^{(b*}		108	107	89	94		
PBA Amberley®	No trial	100	99	99	96		
Fiesta VF		96	97	97	97		
Farah®		97	99	95	96		
Nura [®]		107	102	86	91		
PBA Rana®			85	87	86		
Sowing date		5 May	31 May	17 May	18 May		
Rainfall J–M (mm)		25	62	173	36		
Rainfall A–O (mm)		349	339	382	288		

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

LENTIL

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



Faba bean variety disease ratings - South Australia

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

Selected varieties of most relevance to South Australian 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 South Australia.									
Variety	Ascochyta blight	Cercospora leaf spot	Chocolate spot (Botrytis)	RLN resistance (Pratylenchus thornei)*	Leaf rust				
Cairo	VS	S	S		S				
Doza	VS	S	S		MR				
Farah ^{(b}	MS	S	S		VS				
FBA Ayla⊕		S	S		MR				
Fiesta VF	S	S	S		VS				
Nura®	MR (P)	S	MS		VS				
PBA Amberley®	MR	S	MRMS		VS				
PBA Bendoc [®]	MR	S	S		VS				
PBA Marne®	MS	S	MS (P)		MRMS				
PBA Nanu ^(b)		S	S		MR				
PBA Nasma®	S	S	S		MRMS				
PBA Rana®	MRMS (P)	S	MS		VS				
PBA Samira®	MR (P)	S	MS		S				
PBA Warda®	S	S	S		MRMS				
PBA Zahra®	MRMS	S	MS		S				

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

OAT



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 ^{d)}	Agriculture Victoria	TBC	APB Bondi ^(b) (tested as OZP1903) is a Kaspa-type pea with mid-flowering and mid-maturity. APB Bondi ^(b) 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.

OAT

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



Field pea variety yield performance – Eyre Peninsula

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: Minnipa field pea.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		1.33	2.13	2.69	0.92		
APB Bondi		107	104	116	101		
PBA Butler®			109	110	108		
PBA Pearl		105	100	119	99		
PBA Taylor®		106	105	106	105		
PBA Noosa®		96	99	105	94		
PBA Gunyah®	No trial		103	94	105		
PBA Oura [⊕]		105	97	98	102		
Kaspa	1	96	106	94	105		
PBA Percy	1	101	100	95	107		
PBA Wharton ^(b)	1	106	95	98	97		
Sowing date		6 May	4 June	11 May	4 May		
Rainfall J–M (mm)		77	44	89	38		
Rainfall A–O (mm)		218	210	300	167		

Table 2: Rudall field pea.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.86	1.75	2.12	2.44				
PBA Pearl	128	108	118	123				
APB Bondi ^(b)		117	107	111				
PBA Butler®	97		109	108				
PBA Noosa®	111	103	102	108	tria			
PBA Taylor®	88	112	100	100	Compromised tria			
PBA Percy	107	90	106	100	pron			
Kaspa	88	104	98	95	Com			
PBA Oura®	99	93	99	96				
PBA Gunyah [®]	85		95	90				
PBA Wharton®	88	97	90	90				
Sowing date	17 May	19 May	31 May	24 May	22 May			
Rainfall J–M (mm)	3	45	53	203	36			
Rainfall A–O (mm)	213	252	225	274	152			

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

Table 3: Yeelanna field pea.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	3.42	2.98	3.74	3.45	4.35			
PBA Pearl	105	108	104	118	108			
APB Bondi ^(b)		103	102	107	113			
PBA Butler®	101		100	107	110			
PBA Noosa®	97	102	100	106	106			
PBA Taylor®	100	100	100	98	106			
PBA Percy	106	101	100	102	90			
Kaspa	98	99	97	98	102			
PBA Oura®	104	99	101	96	92			
PBA Gunyah®	100		99	92	96			
PBA Wharton®	100	96	101	89	96			
Sowing date	27 May	19 May	2 June	17 May	18 May			
Rainfall J–M (mm)	6	25	62	173	36			
Rainfall A–O (mm)	346	349	339	382	288			

Special thanks to 2023 trial cooperator, Chad Glover. Learn more via the <u>NVT Long Term Yield Reporter</u> Special thanks to 2023 trial cooperator, BA & JD Heath.

Learn more via the NVT Long Term Yield Reporter

DAT

WHEAT

BARLEY

LENTIL



Field pea variety disease ratings – South Australia

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

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

Table 4: Field pea disease guide for South Australia.							
Variety	Bacterial blight	Downy mildew	Powdery mildew	RLN resistance (Pratylenchus neglectus)*	RLN resistance (Pratylenchus thornei)*		
APB Bondi	S	RMR (S)	RMR				
GIA Kastar®	S	S	RMR				
GIA Ourstar®	S (P)	S	S				
Kaspa	S	S	S				
PBA Butler®	MS	S	S				
PBA Gunyah®	S	S	S				
PBA Noosa®	S	MS	S				
PBA Oura®	MS	S	S				
PBA Pearl	MS	S	S				
PBA Percy	MRMS	S	S				
PBA Taylor	S	S	S				
PBA Twilight [⊕]	S	S	S				
PBA Wharton®	S	S	RMR				
Sturt	MS	S	S				

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

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

OAT

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LENTIL

New lentil varieties

The following information is for lentil varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au 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 ⁽⁾	Agriculture Victoria		ALB Terrier ^(b) 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, ^(b) denotes Plant Breeder's Rights apply. ¹ All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

LUPIN

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



Lentil variety yield performance – Eyre Peninsula

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: Yeelanna lentil.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)		1.86	3.31	1.72	3.92			
GIA Thunder ^{(b*}		122	114	138	111			
GIA Lightning ^{(b*}		109	109	107	112			
PBA Jumbo2 ^(b)]	108	102	132	105			
ALB Terrier®	Compromised tria		109	116	102			
PBA KelpieXT ^{(b*}	lisec	96	91	126	105			
PBA Ace ^(b)	Dron	105	94	95	110			
PBA HighlandXT ^{(b*}	Com	97	100	108	102			
PBA Hurricane XT ^{(b*}		100	97	98	99			
GIA Leader ^{(b*}		104	97	93	97			
PBA Bolt®]	90	97	88	103			
Sowing date	27 May	19 May	2 Jun	17 May	18 May			
Rainfall J–M (mm)	6	25	62	173	36			
Rainfall A–O (mm)	346	349	339	382	288			

Special thanks to 2023 trial cooperator, Chad Glover.

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

Lentil variety disease ratings – South Australia

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

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

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

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

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



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LUPIN

New lupin varieties

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

Variety	Breeding company	End point royalty* (\$)	Comments supplied by breeding company ¹
Gidgee ^{(b}	Australian Grain Technologies	TBC	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 [®]	Australian Grain Technologies	TBC	A very high yielding alternative to PBA Jurien ^(b) , 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, $^{(b)}$ denotes Plant Breeder's Rights apply. ¹ All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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



Lupin variety yield performance – Eyre Peninsula

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: Ungarra narrow-leaf lupin.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.32	1.89		3.22	2.01			
Coyote®		109		103	109			
PBA Bateman®	109	114		103	107			
Rosemont [®]				107	103			
PBA Gunyidi ^(b)	107	112	Compromised tria	100	105			
Lawler®		100	lisec	104	103			
Jenabillup ^(b)	95	111	pron	100	103			
PBA Jurien®	83	107	Com	108	100			
PBA Barlock®	82	110		104	100			
Mandelup ^(b)	96	101		102	100			
Gidgee ^{(b}				105	98			
Sowing date	13 May	5 May	24 May	3 May	2 May			
Rainfall J–M (mm)	4	39	51	131	25			
Rainfall A–O (mm)	260	330	318	364	178			

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

Lupin variety disease ratings – South Australia

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

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

Table 2: Lupin disease guide for South Australia.							
Variety	Anthracnose resistance	Cucumber mosaic virus (CMV)*	Phomopsis pod infection	Phomopsis stem infection	Sclerotinia stem rot		
Coromup [®]	MR		MS	MR	S (P)		
Coyote®	MRMS		MRMS	S	S (P)		
Gidgee ^(b)	RMR		S (P)	MR	S (P)		
Jenabillup ^{(b}	MS		MR	MS	S (P)		
Lawler®	MR		MS	MR	S (P)		
Mandelup [®]	MRMS		S	MR	S (P)		
PBA Barlock ^(b)	RMR		MR	MR	S (P)		
PBA Bateman ^{(b}	MRMS		MS	RMR	S (P)		
PBA Gunyidi ^(b)	MRMS		MRMS	RMR	S (P)		
PBA Jurien®	RMR		MRMS	RMR	S (P)		
PBA Leeman ^{(b}	MRMS		MRMS	MR	S (P)		
Rosemont [®]	MRMS		MRMS (P)	MR	S (P)		
Wonga	MR		MR	MR	S (P)		

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

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



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NVT tools

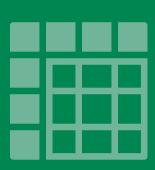


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