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Title:

NVT Harvest Report – Eyre Peninsula

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

PHOTO: Trevor Garnett, GRDC

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### **LEGEND: MEAN VARIETY YIELD PERFORMANCE**

LOW HIGH

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

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

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

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 <a href="https://nvt.grdc.com.au/nvt-disease-ratings">nvt.grdc.com.au/nvt-disease-ratings</a> to find the latest NVT disease ratings.

Refer to the latest *Crop Sowing Guide* for further information at <a href="https://nvt.grdc.com.au/resources/crop-sowing-guides">nvt.grdc.com.au/resources/crop-sowing-guides</a>



### 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 <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**.

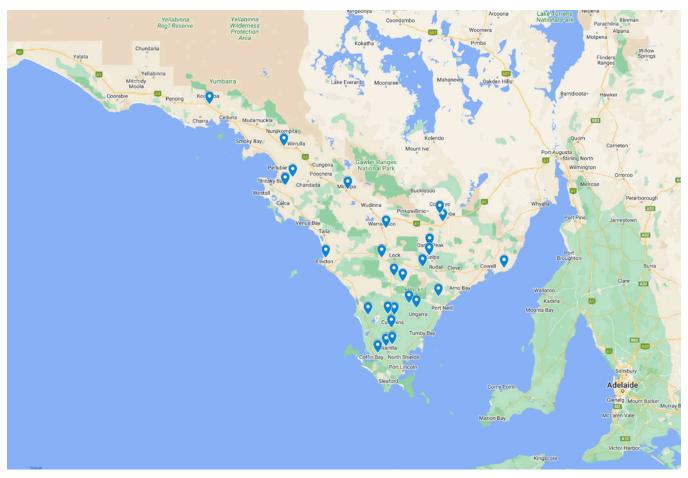
Refer to the latest *Crop Sowing Guide* for further information at <a href="https://nvt.grdc.com.au/resources/crop-sowing-guides">nvt.grdc.com.au/resources/crop-sowing-guides</a>



### **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 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 <a href="https://nvt.grdc.com.au">nvt.grdc.com.au</a> 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
Dozer <sup>()</sup> CL Plus	InterGrain	TBC	3.90	Dozer <sup>®</sup> CL Plus is a quick-mid maturing APW Clearfield <sup>®</sup> Plus wheat. Dozer <sup>®</sup> 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 <sup>®</sup> CL Plus has strong lodging resistance, moderate early vigour, medium plant height and medium coleoptile length. Dozer <sup>®</sup> CL Plus offers good grain size and test weight. Proactive disease management of stripe rust and CCN in South Australia is recommended with Dozer <sup>®</sup> CL Plus to maximise yield and quality potential.
Genie <sup>(†)</sup>	InterGrain	АН	3.50	Genie <sup>(b)</sup> is a mid-slow maturing wheat and is an excellent alternative to RockStar <sup>(b)</sup> in greater than three-tonne-per-hectare yield environments. In these environments, the variety offers medium-high rainfall growers a yield improvement compared with RockStar <sup>(b)</sup> . Genie <sup>(b)</sup> , with its slightly later maturity than RockStar <sup>(b)</sup> and long coleoptile, enables earlier sowing opportunities to be maximised. Genie <sup>(b)</sup> has an excellent disease resistance package including useful stem rust and stripe rust resistances. It offers good test weight, moderate grain size and has a medium plant height. Preliminary internal data indicates Genie <sup>(b)</sup> has good sprouting tolerance. Genie <sup>(b)</sup> has an AH classification in the western and southern zones and an AH classification is expected for the south-eastern and northern zones in 2024.
LRPB Major <sup>(b)</sup>	LongReach Plant Breeders	АН	4.00	Mid-slow maturing spring wheat (similar to Beckom <sup>(b)</sup> and RockStar <sup>(b)</sup> ) 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 <sup>(b)</sup> 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 <sup>()</sup>	LongReach Plant Breeders	АН	3.50	Mid-maturity AH wheat that has consistently outperformed Scepter <sup>(b)</sup> with an improved shorter canopy and better lodging tolerance. Improved powdery mildew (MS) and stripe rust resistance (MS) over Scepter <sup>(b)</sup> , adding some minor genes for both diseases. AH quality in SA and Victoria and commercialised by Pacific Seeds.
Soaker <sup>()</sup>	LongReach Plant Breeders	APW	3.50	Mid-maturity derived from Scepter <sup>(b)</sup> 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 <sup>(b)</sup>	Australian Grain Technologies	APW	4.15	Scepter <sup>(b)</sup> -type Clearfield® variety with increased yield over Scepter <sup>(b)</sup> . The highest-yielding Clearfield® wheat variety in Western Australia, South Australia and Victoria. Tolerant to Clearfield® Intervix® herbicide. Similar disease resistance profile to Scepter <sup>(b)</sup> . Similar grain size and test weight as Scepter <sup>(b)</sup> . Mid-season maturity, similar to Scepter <sup>(b)</sup> . APW quality classification in SA, Victoria, southern NSW, classification for WA pending.

<sup>\*</sup> EPR amount is ex-GST,  $\phi$  denotes Plant Breeder's Rights apply. <sup>1</sup> All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

Refer to the latest *Crop Sowing Guide* for further information at <a href="https://nvt.grdc.com.au/resources/crop-sowing-guides">nvt.grdc.com.au/resources/crop-sowing-guides</a>



### 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.

2022	2023 6.11 118
	118
	106
	104
	109
	111
	110
	110
	112
idiled	108
	109
	111
	107
	106
	103
	110
19 May	12 May
147	33
206	268

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

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

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 <sup>(b)</sup>	118	103	110	119	107		
LRPB Matador <sup>(b)</sup>				113	113		
Ballista <sup>(b)</sup>	114	109	109	114	109		
Tomahawk CL Plus <sup>(1)*</sup>				107	120		
RockStar <sup>(b)</sup>	106	113	108	113	110		
Calibre <sup>(b)</sup>		111	115	105	116		
Dozer <sup>⟨b</sup> CL Plus*			106		105		
Brumby <sup>(b</sup>			111	107	114		
Boree <sup>(b)</sup>		107	107	108	108		
Genie <sup>(b)</sup>					98		
Sunblade CL Plus <sup>(b*</sup>		106	104	108	105		
Scepter <sup>(b)</sup>	101	104	111	103	112		
Soaker <sup>(h)</sup>					110		
Catapult <sup>(b)</sup>	96	107	107	102	109		
Sunmaster <sup>(b)</sup>			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.

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 <sup>(b)</sup>	143	108	134	112	110		
LRPB Matador <sup>(b)</sup>				110	113		
Calibre <sup>(b)</sup>		117	126	104	116		
Ballista <sup>(b)</sup>	136	114	121	111	111		
RockStar <sup>(b)</sup>	113	112	111	113	111		
Brumby <sup>(b)</sup>			115	106	114		
Dozer CL Plus*			116		106		
Scepter®	119	107	120	102	113		
Boree <sup>(b)</sup>		107	115	107	108		
Sunblade CL Plus <sup>(b*</sup>		109	105	107	108		
Soaker®					111		
Catapult <sup>(b)</sup>	104	105	108	103	108		
Genie <sup>(b)</sup>					100		
Razor CL Plus <sup>(b*</sup>	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.

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

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 <sup>(b)</sup>	116	112		105	116	
Genie <sup>(b)</sup>					110	
Calibre <sup>(b)</sup>		117		101	112	
Dozer CL Plus*					106	
Vixen <sup>(b)</sup>	139	106		92	115	
RockStar®	95	111		109	102	
Sunblade CL Plus <sup>(b*</sup>		111	Trial failed	100	111	
LRPB Matador®			lalleu	99	107	
LRPB Major <sup>(b)</sup>					99	
Cosmick <sup>(b)</sup>	104	103		101	108	
Boree <sup>(b)</sup>		106		101	100	
Emu Rock <sup>(b</sup>	128	94		89	111	
LRPB Dual <sup>(b)</sup>				102	102	
Brumby <sup>(b)</sup>				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.



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

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

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 <sup>(b)</sup>		106	116	103	121	
RockStar <sup>(b)</sup>	110	111	104	112	103	
LRPB Matador <sup>(b)</sup>				107	111	
Ballista <sup>(b)</sup>	115	107	108	107	112	
Tomahawk CL Plus <sup>(b*</sup>				101	119	
Brumby <sup>(b</sup>			108	107	107	
Vixen <sup>(b)</sup>	115	101	107	105	109	
Dozer <sup>(b)</sup> CL Plus*			103		103	
Boree <sup>(b)</sup>		105	105	106	104	
Scepter <sup>(b)</sup>	112	101	109	102	110	
Catapult <sup>(b)</sup>	106	104	105	105	102	
Sunblade CL Plus <sup>(b*</sup>		105	102	105	106	
Genie <sup>(b)</sup>					96	
LRPB Major <sup>(b)</sup>					101	
Soaker <sup>(b</sup>					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.

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

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 <sup>(b)</sup>		109	116	106	106	
LRPB Matador <sup>(b)</sup>				108	103	
RockStar <sup>(b)</sup>	111	106	109	112	103	
Brumby <sup>(b</sup>			112	110	106	
Ballista <sup>(b)</sup>	114	107	107	108	103	
Vixen <sup>(b)</sup>	116	109	108	105	101	
Boree <sup>(b)</sup>		106	109	107	102	
Scepter <sup>(b)</sup>	107	104	111	105	106	
Dozer <sup>⟨b</sup> CL Plus*			107		99	
Catapult <sup>(b)</sup>	105	103	110	106	103	
Soaker <sup>(b)</sup>					106	
Sunblade CL Plus <sup>(b*</sup>		101	100	106	104	
Sheriff CL Plus®	101	102	106	104	100	
LRPB Major <sup>(b)</sup>					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	

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 <sup>(b)</sup>	100		141	109	121	
Ballista <sup>(b)</sup>	108		120	110	119	
LRPB Matador <sup>(b)</sup>				105	124	
Calibre <sup>(b)</sup>			122	103	131	
Reilly®				110	103	
Dozer <sup>(b)</sup> CL Plus*			115		111	
RockStar <sup>(b)</sup>	108		98	106	112	
Tomahawk CL Plus <sup>(b*</sup>		Trial failed		95	136	
Genie <sup>(b)</sup>		laliea			92	
Boree <sup>(b)</sup>			109	102	113	
Sunblade CL Plus <sup>(b*</sup>			100	105	107	
Emu Rock <sup>(b)</sup>	95		129	100	103	
Razor CL Plus <sup>(b*</sup>	89		132	95	119	
Brumby <sup>(b</sup>			102	99	118	
Scepter <sup>(h)</sup>	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 NVT Long Term Yield Reporter

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.77	2.60	5.67	
Tomahawk CL Plus <sup>(1)*</sup>				108	
Calibre <sup>(b)</sup>	]	115	127	109	
Brumby <sup>(b)</sup>			120	110	
RockStar <sup>(b)</sup>		110	113	112	
LRPB Matador <sup>(b)</sup>				108	
Denison <sup>(b)</sup>	ial		115	110	<u>ia</u>
Scepter <sup>(b)</sup>	Compromised trial	112	121	105	Compromised trial
Ballista <sup>(b)</sup>	omis	109	116	108	omis
Devil <sup>(b)</sup>	mpr	109	114	107	mpr
Sunmaster <sup>(b)</sup>	의		110	108	
Sunblade CL Plus <sup>(b*</sup>		106	110	108	
Catapult <sup>(b</sup>		108	111	106	
Boree <sup>(b)</sup>		107	111	106	
Vixen <sup>(b)</sup>		107	116	103	Ī
Cutlass <sup>(b)</sup>		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 NVT Long Term Yield Reporter



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

Table 9: Wanilla main season wheat.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)		5.47		6.00	5.09			
Kingston <sup>(b)</sup>		124		107	107			
Tomahawk CL Plus <sup>(b*</sup>				105	115			
Vixen <sup>(b)</sup>		119		108	108			
Sunmaster®				104	105			
LRPB Matador <sup>(b)</sup>				106	108			
Soaker <sup>(b)</sup>			<u>ia</u>		109			
Scepter <sup>(b)</sup>		109	Compromised tria	103	109			
Ballista <sup>(b)</sup>	Trial failed	109		107	104			
Brumby <sup>(b)</sup>	lanea			105	108			
RockStar <sup>(b)</sup>		107		107	105			
Sunblade CL Plus <sup>(h*</sup>		109		105	103			
Dozer <sup>()</sup> CL Plus*					103			
Boree <sup>(b)</sup>		105		104	105			
Calibre <sup>(b)</sup>		100		105	106			
Denison <sup>(b)</sup>				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 t	hanks to	2023	trial	coope	rator,	GS &	KS	Charlton.
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<sup>\*</sup> herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Table 11: Minnip	Table 11: Minnipa early season wheat.											
Year	2019	2020	2021	2022	2023							
Mean yield (t/ha)		1.99	3.94	4.63	2.14							
IGW6755					104							
Stockade <sup>(b)</sup>				119	98							
Genie <sup>(b)</sup>					116							
LRPB Major <sup>(b</sup>					115							
RockStar <sup>(b)</sup>		99	103	112	111							
Denison <sup>(b)</sup>	]	104	108	103	113							
Valiant <sup>(b)</sup> CL Plus*	]		106	109	108							
DS Bennett <sup>®</sup>	Trial failed	114	97	117	81							
Cutlass <sup>(b)</sup>	lalled	101	103	104	105							
Catapult <sup>(b)</sup>		102	103	97	113							
Illabo <sup>(b</sup>		105	102	104	92							
Longsword <sup>(b)</sup>		109	106	90	99							
Brumby <sup>(b)</sup>					110							
EG Titanium	]	91	96	100	97							
DS Pascal <sup>(b)</sup>		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									

Table 10: Warrar	Table 10: Warramboo main season wheat.										
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	1.88	1.05	3.42	5.75							
Tomahawk CL Plus®*				118							
Vixen <sup>(b)</sup>	124	145	107	112							
LRPB Matador <sup>(b)</sup>				111							
Calibre <sup>(b)</sup>		131	112	110							
Ballista <sup>(b)</sup>	119	125	107	110							
Scepter <sup>(h)</sup>	105	118	112	110	ia						
Brumby <sup>(b)</sup>			111	110	Compromised tria						
Devil®	109	120	107	108	omis						
Razor CL Plus®*	108	129	108	105	mpro						
RockStar <sup>(h)</sup>	109	108	107	109	8						
Boree <sup>(b)</sup>		118	105	106							
Sunblade CL Plus <sup>(b*</sup>		97	107	108							
LRPB Anvil® CL Plus*		131	107	101							
Sunmaster®			111	109							
Catapult <sup>(b)</sup>	99	107	106	105							
Sowing date	7 May	18 May	27 May	26 May	4 May						
Rainfall J–M (mm)	4	42	42	69	30						
Rainfall A-O (mm)	257	223	162	263	120						



Special thanks to 2023 trial cooperator, Minnipa Agricultural Centre.

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

Special thanks to 2023 trial cooperator, Kane & David Murphy.

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

### 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 Evre Peninsula in 2022.

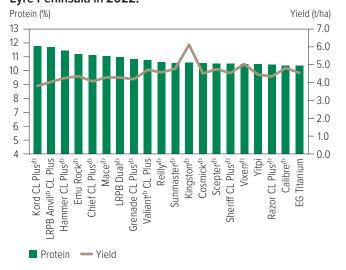


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2022.

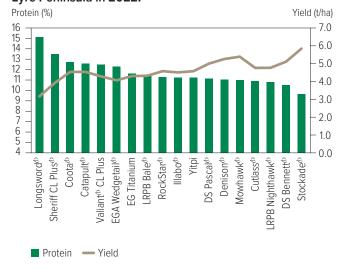


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from eight NVT sites in Eyre Peninsula in 2023.

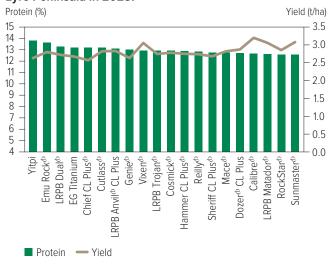
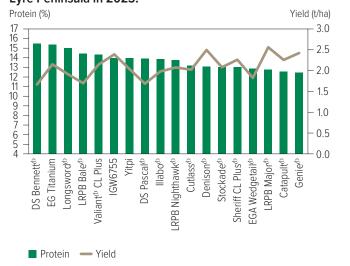


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2023.





#### **Test weight comparisons**

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

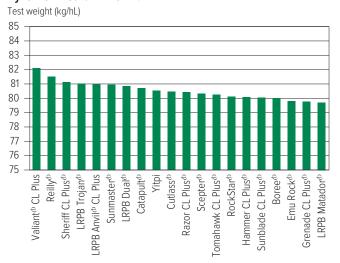


Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2022.

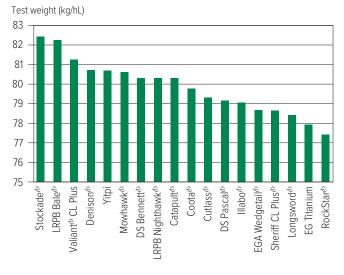


Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from eight NVT sites in Eyre Peninsula in 2023.

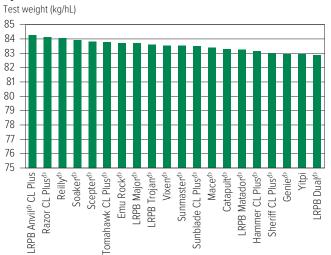
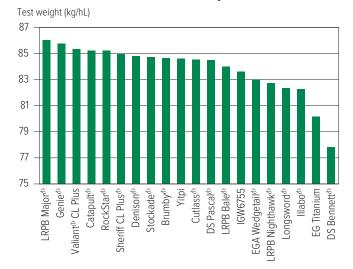


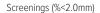
Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2023.





### **Screenings comparisons**

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



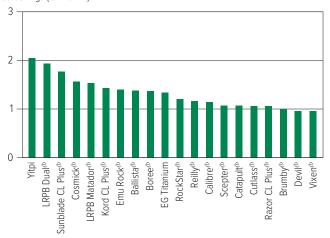


Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2022.

Screenings (%<2.0mm)

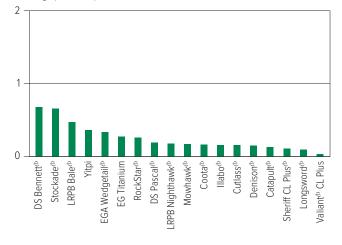


Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from eight NVT sites in Eyre Peninsula in 2023.

Screenings (%<2.0mm)

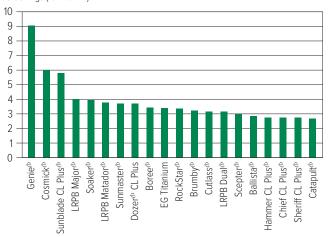
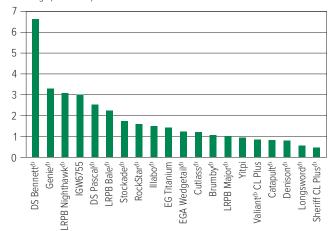


Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Eyre Peninsula in 2023.

Screenings (%<2.0mm)





### 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 foi	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 <sup>(b)</sup>	MRMS	MSS	RMR	S	MRMS	S	S	S	MR	S	S	S
Ballista <sup>(b</sup>	MR	MSS	S	SVS	MS	SVS	S	MRMS	MRMS	S	S	MS
Beckom <sup>(b)</sup>	MRMS	MRMS	MSS	S	MSS	MSS	S	MSS	R		S	MRMS
BigRed <sup>(b)</sup>	S	RMR	MRMS	MR	MR	RMR	MS	MS	S		MSS	MR
Boree <sup>(h)</sup>	MR	SVS	S	SVS	MRMS	SVS	S	MSS	MSS		S	S
Borlaug 100 <sup>th</sup>	MR	SVS	MR	MSS	MRMS	S	S	MS	MS	MSS (P)	MSS	MSS
Brumby <sup>(b</sup>	MR	MS	SVS	S	MRMS	MR/S	MRMS	MS (P)	MRMS	S	S	MSS
Calibre <sup>(b)</sup>	MR	S	S	S	MRMS	MSS	S	MSS	MRMS	S	S	MSS
Catapult <sup>()</sup>	MR	S	S	MSS	MRMS	S	S	MS	R	S	MSS	S
Chief CL Plus <sup>(b)</sup>	MR	SVS	MR	S	MRMS	SVS	MRMS	MSS	MS	MSS	MSS	MS
Coolah <sup>(b)</sup>	MR	MSS	RMR	MSS	MSS	S	S	MS	S		MSS	S
Coota <sup>(b)</sup>	RMR	S	MR	S	MSS	S	MR	MS	MR	S	MSS	MS
Cosmick <sup>(b)</sup>	MS	MSS	SVS	SVS	MRMS	MSS	MSS	MSS	S		S	MRMS
Cutlass <sup>(b)</sup>	R	MSS	RMR	MSS	MSS	MSS	MSS	MSS	MR		S	MS
Denison <sup>(b</sup>	MS	S	S	MSS	MRMS	S	S	S	MS	S	MSS	MS
Devil <sup>(b)</sup>	S	SVS	SVS	SVS	MRMS	S	MSS	S	MSS	S	MSS	MSS
Dozer <sup>(b)</sup> CL Plus	MS	S	MSS	S (P)	MS	S	MRMS	S	MS (P)	SVS (P)	S	MRMS (P
DS Bennett <sup>(1)</sup>	MS	S	SVS	MSS	MRMS	R	S	S	S		VS	MSS
DS Pascal <sup>(b)</sup>	MSS	MRMS	MRMS#	MSS	MS	RMR	S	S	S		S	MS
EG Jet <sup>(b)</sup>	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 <sup>()</sup>	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 <sup>(b)</sup>	MS	SVS	SVS	S	MS	MSS	MSS	S	S		MSS	MSS
Genie <sup>(b)</sup>	MS (P)	MRMS (P)	S (P)	S (P)	MRMS (P)	SVS (P)						
Hammer CL Plus <sup>(b)</sup>	MR	MS	S	MSS	MRMS	S	MSS	S	MRMS	S	MSS	MRMS
Hyperno <sup>(b</sup>	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
lllabo <sup>(b</sup>	MRMS	MRMS	S	MSS	MS	R	MSS	MSS	MRMS	S	S	MRMS
Jillaroo <sup>(b</sup>	MS	MSS	S	S	MS	SVS	S	MS (P)	MS	S	S	MS
Kingston <sup>(b</sup>	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 <sup>(b</sup>	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 <sup>(b)</sup>	MS	S	S	S	MS	SVS	MSS	MRMS	MRMS	S	S	MRMS

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Table 12: Wheat	disease	guide fo	South A	ustralia (	continue	ed).						
	rust	Stripe rust (east coast resistance)	ust	Septoria tritici blotch	Yellow leaf spot	Powdery mildew	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thorneı)		ot	n rot	Black point
Variety	Stem rust	Stripe rust (east coas	Leaf rust	Septo	Yellov	Powd	RLN r (Prat)	RLN r (Prat)	CCN	Eyespot	Crown rot	Black
LRPB Bale <sup>(b)</sup>	MRMS	MRMS	MSS	MSS	SVS	MS	S	S	R	S	S	MS
LRPB Beaufort®	SVS	RMR	MSS	S	MRMS	RMR	MS	MSS	MS		S	MRMS
LRPB Dual <sup>(b)</sup>	MRMS	MS	MSS	MSS	S	S	MSS	MSS	R	S	S	S
LRPB Havoc <sup>⊕</sup>	S	MSS	S	MSS	MRMS	S	S	MSS	S		MSS	MS
LRPB Impala <sup>(b)</sup>	MR	MRMS	SVS	SVS	MSS	R	SVS	S	MSS		MSS	MS
LRPB Kittyhawk <sup>(b)</sup>	MRMS (S)	MR	MR	MRMS	MRMS	MS	S	S	S	S	SVS	MRMS
LRPB Major <sup>(b)</sup>	MRMS	MRMS	MR#	MSS	MS	MS	MSS	MSS	MRMS (P)	S (P)	S	MRMS (P)
LRPB Matador <sup>(b)</sup>	MS	MS	MSS	S (P)	MRMS	MS	S	MRMS	MS (P)	S (P)	S	MRMS (P)
LRPB Nighthawk <sup>(b)</sup>	RMR	MR	MSS	MS	MS	SVS	MSS	MS	MS		MSS	MS
LRPB Oryx <sup>(b)</sup>	MR	MS	RMR#	SVS	MSS	MR	MSS	MSS	S	S	MSS	MS
LRPB Raider <sup>(b)</sup>	RMR	MR	RMR	S	MSS	S	MSS	MS	S		S	MSS
LRPB Scotch <sup>(b)</sup>	MSS	MRMS	MR#	S	MRMS	MR	MS	S	MS	S	S	MS
LRPB Scout <sup>(b)</sup>	MRMS	MS	MS	S	SVS	MRMS	S	MSS	R		S	S
LRPB Trojan®	MRMS	S	MR#	S	MSS	S	MSS	MSS	MS	MS	MS	MS
Mace <sup>(b)</sup>	MRMS	SVS	S	SVS	MRMS	MSS	MS	MS	MRMS	S	S	MRMS
Manning <sup>(b)</sup>	MR	RMR	MSS	MRMS/S	MRMS	MS	MSS	S	S	MS (P)	VS	S
Naparoo <sup>(b</sup>	MRMS	MRMS	MS	S	MRMS	R	SVS	S			S	
Razor CL Plus <sup>(b)</sup>	MRMS	MRMS	S	SVS	MSS	MSS	S	MS	MR	S	S	MS
Reilly <sup>(b)</sup>	MRMS	MS	MSS	S	S	MSS	MS	MSS	R	S	S	MSS
RGT Accroc <sup>®</sup>	MS	RMR	SVS	MS	MRMS	MSS	MS	MSS	S	MSS (P)	SVS	MRMS
RGT Calabro	MS	RMR	MSS	MRMS	MR	RMR	S	MS	S		SVS	MS
RGT Cesario <sup>(b)</sup>	RMR	RMR	RMR	MRMS	MR	RMR	MRMS	MSS	MSS (P)		VS	
RGT Waugh®	MS	RMR	S	MRMS#	MRMS	R	MSS	MSS	MS		S	MRMS
RGT Zanzibar	VS	MR	SVS	MSS	MS	RMR	S	MS (P)	MSS		S	MRMS
RockStar <sup>(b)</sup>	MRMS	S	S	S	MRMS	SVS	MRMS	MS	MSS	S	S	MSS
Saintly <sup>(b</sup>	MS	MRMS	RMR	MRMS/S	MRMS	S	MS	RMR	MS		VS (P)	MS
Scepter <sup>(b)</sup>	MRMS	MSS	MSS	S	MRMS	SVS	S	MSS	MRMS	S	MSS	MS
Severn <sup>(b)</sup>	MS	RMR	MRMS	MSS	MRMS	RMR	S	MRMS	MSS (P)		S	MR
Sheriff CL Plus <sup>(b)</sup>	MS	SVS	SVS	S	MRMS	SVS	MRMS	MRMS	MS	S	S	MS
Soaker <sup>(b)</sup>	MR (P)	MS (P)	S (P)	S (P)	MS (P)	S (P)						
SQP Revenue <sup>(b)</sup>	RMR	MR	VS	MSS	MRMS	R	S	S	S	S	S	MS
Sting <sup>(b)</sup>	MRMS	S	SVS	SVS	MRMS	SVS	MS	MS	MS		MSS	S
Stockade <sup>(b)</sup>	MS	MR	MR	MS	MRMS	SVS	S	MSS	MRMS		S	MRMS
Sunblade CL Plus <sup>(b)</sup>	MS	MRMS	MSS	S	MSS	S	MSS	MRMS	MSS		S	MRMS
Sunflex <sup>(b)</sup>	MR	MRMS	RMR#	SVS	MS	S	S	MSS	MS		MSS	MSS
Sunmaster <sup>(†)</sup>	MS	MRMS	RMR	S	MSS	MSS	MRMS	MS	MSS		MSS	MR
Sunprime <sup>(b)</sup>	MS	MS	MR#	S	MSS	MSS	S	S	MS		MSS	MSS
Tomahawk CL Plus®	MR	MSS	S S	S (P)	MRMS	SVS	S	MS	MRMS (P)	S (P)	S S	S (P)
Valiant <sup>(b)</sup> CL Plus	MR	S	S	MSS	MRMS	VS	S	S (P)	MSS (P)	MSS	MSS	MS (P)
Vixen <sup>(b)</sup>	MRMS	SVS	SVS	S	MRMS	SVS	MRMS	MS	MSS (F)	S	S S	MSS (F)
Willaura <sup>(b)</sup>	MR	S	MRMS	S	MS	SVS	MSS	MRMS	MS	3	S	MRMS
Yitpi	S	MS	S	S	SVS	MS	MSS	S	MR		S	MS
	)	LIVIO		)	373	LIVIO	INIOO	)	IVIT		)	I IVIS

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Table 12: Whea	t disease	guide fo	South A	ustralia (	continue	d).						
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 thorner)	CCN	Eyespot	Crown rot	Black point
DURUM												
Caparoi <sup>(b</sup>	MR	MS	RMR	MRMS/S	MR	S	MS	MR	MRMS (P)		VS	MSS
DBA Bindaroi <sup>(b)</sup>	MR	MS	MR	MS	MS	MSS	MRMS	MR	MS		SVS	MRMS
DBA Lillaroi <sup>®</sup>	RMR	MS	RMR	S	MRMS	MS	MRMS	RMR	S		SVS	MS
DBA Mataroi <sup>(b)</sup>	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 <sup>(b)</sup>	MR	MRMS	RMR	MRMS/S	MRMS	SVS	MS	MR	MS		SVS	MS
DBA-Aurora <sup>(b)</sup>	RMR	MRMS	RMR	MRMS/S	MRMS	MSS	MRMS	RMR	MSS		SVS	MS
Jandaroi <sup>(b)</sup>	MRMS	MRMS	MR	MSS	MRMS	S	MS	MRMS	MS		VS	MS
Patron <sup>®</sup>	RMR	MRMS	MR#	MRMS	MRMS	MSS	MRMS	MR	S		SVS	MSS
Westcourt <sup>(b)</sup>	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.

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

Variety	Breeding company	Grain classification	End point royalty* (\$)	Comments supplied by breeding company <sup>1</sup>
Neo <sup>⊕</sup> CL	InterGrain	Under malt evaluation	4.25	Neo <sup>®</sup> CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to mediumhigh rainfall environments. Neo <sup>®</sup> CL provides an outstanding disease resistance profile with excellent resistance to cereal cyst nematode, powdery mildew and the spot form of net blotch, and useful resistance to the net form of net blotch and leaf scald. Neo <sup>®</sup> CL has a semi-prostrate early growth habit, medium plant height, good tolerance to lodging, good grain retention and tolerance to head loss, and very good levels of grain plumpness. Neo <sup>®</sup> CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025.
Spinnaker <sup>(b</sup>	Secobra Recherches		TBC	Released under code name SCA21-Y003.

<sup>\*</sup> EPR amount is ex-GST, @ denotes Plant Breeder's Rights apply. 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 <a href="nvt.grdc.com.au/resources/crop-sowing-guides">nvt.grdc.com.au/resources/crop-sowing-guides</a>



### 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: Cummin	s main s	eason b	arley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		4.18	5.31		6.22
Neo® CL*					125
Cyclops <sup>(b)</sup>		126	108		119
Minotaur®		127	104		117
Maximus <sup>(1)</sup> CL*		121	108		115
Laperouse <sup>(b)</sup>		118	103		119
Yeti <sup>(b)</sup>	ia	112	106		117
Combat <sup>(b)</sup>	Compromised trial		109		110
Rosalind <sup>(b)</sup>	simc	116	109	Trial failed	107
Spartacus CL <sup>(b*</sup>	mpr	111	108		105
Spinnaker®	의				100
La Trobe <sup>(h)</sup>		102	108		97
RGT Planet <sup>(b)</sup>		110	101		96
Beast <sup>(b)</sup>		86	107		105
Zena <sup>(1)</sup> CL*			100		95
Fandaga <sup>(b)</sup>			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.

 $<sup>^{\</sup>star}$  herbicide-tolerant variety. Learn more via the  $\underline{\text{NVT Long Term Yield Reporter}}$ 

Table 3: Ellistor	ı main se	ason ba	rley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	3.65	2.22	4.35	6.85	3.74
Neo® CL*					112
Rosalind <sup>(b)</sup>	107	116	105	112	111
Combat <sup>(b)</sup>				109	109
Yeti <sup>(b)</sup>	107	116	111	102	108
Spinnaker <sup>(b)</sup>				115	106
Cyclops <sup>(b)</sup>		108	111	104	104
Minotaur <sup>(b)</sup>		105	108	109	103
Beast <sup>(b)</sup>	111	119	108	95	111
Leabrook <sup>(b)</sup>	111	114	106	96	110
RGT Planet <sup>(b)</sup>	100	100	95	116	104
Maximus <sup>(b)</sup> CL*	103	113	110	100	105
Zena <sup>()</sup> CL*				114	103
Compass <sup>(b)</sup>	110	114	105	90	109
Fathom <sup>(b)</sup>	106	110	103	96	106
Laperouse <sup>(b)</sup>	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.

Table 2: Darke P	eak mai	n seasoı	1 barley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.45	1.83	2.24	7.16	1.75
Neo® CL*					106
Leabrook <sup>(b)</sup>	131	129	133	103	121
Beast <sup>(b)</sup>	136	132	135	98	127
Combat <sup>(h)</sup>				111	120
Yeti <sup>(b)</sup>	131	136	136	97	122
Cyclops <sup>(b)</sup>		121	126	102	119
Titan AX <sup>(b*</sup>			131	102	114
Compass <sup>(b)</sup>	130	128	134	98	120
Laperouse <sup>(b)</sup>	132	125	131	97	113
Commodus <sup>(1)</sup> CL*		124	130	97	117
Minotaur <sup>(b)</sup>		116	115	107	109
Maximus <sup>(b)</sup> CL*	129	125	125	90	122
Rosalind <sup>(b)</sup>	111	114	107	103	118
Fathom <sup>(b)</sup>	120	110	113	96	117
Spinnaker <sup>(b</sup>				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.

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

Table 4: Minnipa main season barley.										
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	1.93	2.20	3.07	4.56	1.86					
Neo® CL*					108					
Yeti <sup>(b)</sup>	122	107	116	106	112					
Combat <sup>(b)</sup>				110	112					
Rosalind <sup>(b)</sup>	120	107	113	104	113					
Beast <sup>(b)</sup>	126	110	118	94	118					
Cyclops®		105	109	111	108					
Leabrook <sup>(b)</sup>	120	110	115	99	115					
Minotaur®		104	106	117	104					
Maximus <sup>(b)</sup> CL*	120	104	112	99	110					
Laperouse <sup>(b)</sup>	110	102	107	108	103					
Compass <sup>(b)</sup>	119	109	114	90	114					
Spinnaker <sup>(b</sup>				110	104					
Titan AX <sup>(b</sup>			107	99	108					
Commodus <sup>(b)</sup> CL*		107	111	90	111					
Fathom <sup>(b)</sup>	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.



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

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

Table 5: Piednip	Table 5: Piednippie main season barley.										
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	2.90		3.17	4.93	1.88						
Neo® CL*					105						
Combat <sup>(b)</sup>				111	115						
Rosalind <sup>(b)</sup>	107		108	109	111						
Cyclops <sup>(b)</sup>			113	106	110						
Spinnaker <sup>(b</sup>				116	102						
Minotaur <sup>(b)</sup>		<u> </u>	109	112	104						
Beast <sup>(b)</sup>	114	ed tr	111	92	119						
RGT Planet®	98	Compromised trial	99	117	97						
Leabrook <sup>(b)</sup>	112	mpro	110	94	117						
Yeti <sup>(b)</sup>	105	3	109	99	111						
Zena <sup>()</sup> CL*		]		114	96						
Maximus <sup>(b)</sup> CL*	104		107	97	109						
Fathom <sup>(b)</sup>	111		105	93	112						
Titan AX <sup>(b*</sup>		1	109	92	112						
Laperouse <sup>(b)</sup>	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 tria	l cooperator, F	lollitt Pastoral	Pty Ltd.								

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

Table 7: Wharm	inda mai	n seaso	n barley.		
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.12	1.39		5.76	2.08
Combat <sup>(b)</sup>				110	132
Titan AX <sup>(b*</sup>				99	141
Leabrook <sup>(b</sup>	141	117		100	128
Neo® CL*					108
Compass <sup>(b)</sup>	150	118		96	125
Beast <sup>(b)</sup>	150	114	iai	98	119
Cyclops <sup>(b)</sup>		105	Compromised trial	104	124
Commodus <sup>(†)</sup> CL*		116	Simis	95	122
Minotaur <sup>(b)</sup>		105	mpro	106	111
Yeti <sup>(b)</sup>	127	115	ပါ	99	105
Laperouse <sup>(b)</sup>	109	113		98	117
Fathom <sup>(b)</sup>	133	101		98	109
Commander®	91	107		95	130
Rosalind®	117	97		106	90
Spinnaker <sup>(b)</sup>				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

Table 6: Wanilla	Table 6: Wanilla main season barley.									
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)		4.57	5.46	5.88	5.80					
Neo <sup>®</sup> CL*					116					
Combat <sup>(b)</sup>			112	111	114					
Minotaur <sup>(b)</sup>		119	105	109	111					
Cyclops®		116	106	106	115					
Rosalind <sup>(b)</sup>		113	105	107	112					
Spinnaker <sup>(b)</sup>				111	104					
RGT Planet <sup>(b)</sup>		108	108	110	100					
Yeti <sup>(b)</sup>	Trial failed	113	97	102	113					
Maximus <sup>(h)</sup> CL*	lalica	115	98	98	113					
Laperouse <sup>(b)</sup>		113	98	100	110					
Zena <sup>(b)</sup> CL*			106	108	99					
Fandaga <sup>(b)</sup>			106	108	96					
Spartacus CL <sup>(b*</sup>		106	99	96	108					
La Trobe <sup>(b)</sup>		97	103	96	106					
Beast <sup>(b)</sup>		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, Tim Ottens.

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

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

### **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 main season barley varieties from six NVT sites in Eyre Peninsula in 2022.

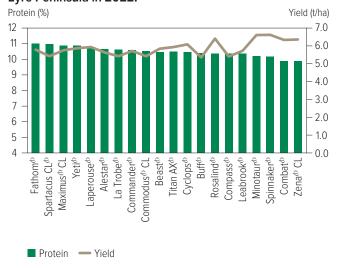
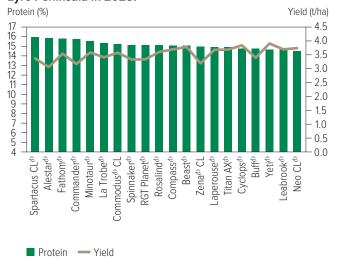


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.



### **Test weight comparisons**

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

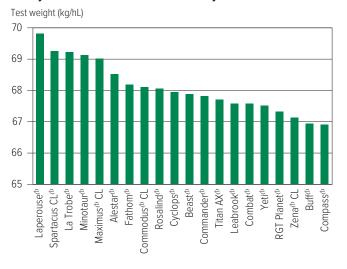
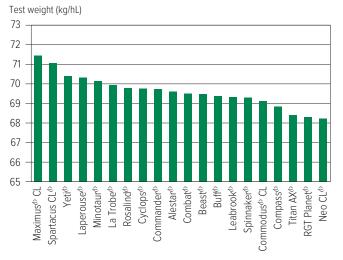


Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.





### **Screenings comparisons**

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



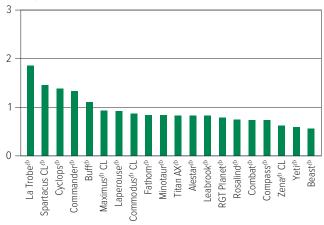
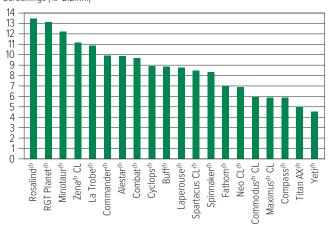


Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.

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.

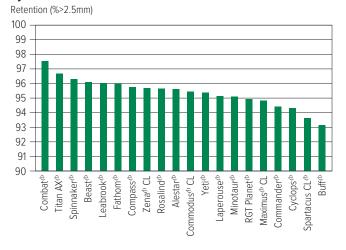
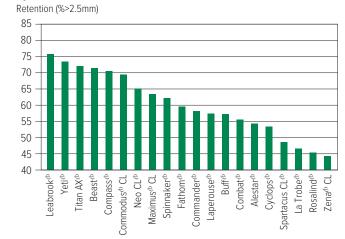


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from seven NVT sites in Eyre Peninsula in 2023.





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 dise	asa auida t	for South	Australia								
Variety	Teaf 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 <sup>(b)</sup>	MSS	MRMS-S	S	SVS	SVS	MR	MR	R^ (P)	S	MRMS	MR
Banks <sup>(b)</sup>	MRMS	MR	S	MS-SVS	VS	MS	MR	S	MSS	MS	MS
Bass <sup>(b</sup>	S	MS-SVS	MSS	MSS	VS	MS	MRMS	S	MSS	MRMS	S
Beast <sup>(b)</sup>	MS	MRMS-S	MS	SVS	SVS	MRMS	MRMS	MR	S	MSS	S
Bottler <sup>(b)</sup>	MSS	R-MS	MSS	SVS	SVS	MS	RMR		SVS	MRMS	RMR
Buff <sup>(b)</sup>	SVS	MR-MS	MSS	MS-VS	SVS	MRMS	MS		S	MS	S
Combat <sup>(b)</sup>	SVS	MRMS-S	RMR	MS-S	SVS	MRMS	MS	MR	S	MSS	MS
Commander <sup>(h)</sup>	MSS	S-VS	MSS	SVS	SVS	MRMS	MRMS	R	S	MSS	MSS
Commodus <sup>(b)</sup> CL	S	MRMS-MSS	MSS	MSS-SVS	SVS	MRMS	MRMS	R	S	MS	MSS
Compass <sup>(b)</sup>	S	MRMS-S	MS	MSS-SVS	SVS	MRMS	MR	R	MSS	MSS	S
Cyclops <sup>(b)</sup>	S	MR-MS	MSS	S	SVS	MRMS	MRMS	S	MSS	MSS	SVS
Fairview <sup>(b)</sup>	S	SVS	S	SVS	SVS	MR	MR		MSS	MS	R
Fandaga <sup>(b)</sup>	MSS	MRMS#	S	SVS	VS	MR	MR	R	MSS	MRMS	R
Fathom <sup>(b</sup>	MSS	MSS-SVS	RMR	R-S	SVS	MRMS	MR	R	SVS	MSS	MRMS
Flinders <sup>(b)</sup>	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 <sup>()</sup>	S	MS-S	S	R-SVS	SVS	MRMS	MRMS	R	S	MSS	MSS
Laperouse <sup>(b)</sup>	S	MRMS	MRMS	SVS	VS	MRMS	MR	S	S	MSS	MSS
Leabrook <sup>(b)</sup>	S	MR-MSS	MS	MRMS-SVS	VS	MRMS	RMR	RMR	S	MS	S
Litmus <sup>(b)</sup>	S	S-VS	S	VS	VS	MS	MRMS	MS	S	MS	MS
Maximus <sup>(1)</sup> CL	S	MR-MS	MS	R-SVS	VS	MRMS	MRMS	R	S	MSS	S
Minotaur <sup>(b)</sup>	SVS	MR-MS	S	VS	SVS	MRMS	MRMS	R	MSS	MRMS	S
Neo <sup>(b)</sup> CL	MSS (P)	MS (P)	MR (P)	S (P)	SVS (P)	RMR (P)	MR (P)	R		MRMS (P)	RMR (P)
RGT Planet <sup>(b)</sup>	S	MRMS-SVS	SVS	R-SVS	SVS	MRMS	MR	R (P)	MSS	MRMS	RMR
Rosalind <sup>(b)</sup>	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 <sup>(h)</sup>	S	R-MR	MSS	MRMS-SVS	SVS	MRMS	MRMS	S	S	MS	MRMS
Spartacus CL <sup>(b)</sup>	MSS	MS-VS	S	R-SVS	VS	MRMS	MRMS	R	S	MSS	MSS
Spinnaker <sup>(h</sup>	S	SVS	SVS	S	VS	MR	MS	S	S	MRMS	RMR
Titan AX <sup>(b)</sup>	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 <sup>(b)</sup>	MS	MRMS	S	R-S	SVS	MRMS	MS		MSS	MRMS	RMR
Yeti <sup>(†)</sup>	SVS	MR-MS	MS	VS	VS	MR	MR	RMR	S	MSS	S
Zena <sup>(1)</sup> CL	S	MR-S	S	R-S	VS	MRMS	MR	R	S	MRMS (P)	RMR

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

<sup>^</sup> line contains a few susceptible off types.



### 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 <sup>(b)</sup>		101		143						
Bannister <sup>(b)</sup>		100		123						
13008-18				118						
Williams <sup>(b)</sup>		100	Compromised trial	108	Trial					
Koorabup <sup>(b)</sup>	Nie Autol	99		100						
Yallara <sup>(b</sup>	No trial	99		97	failed					
Possum		100		94						
Bilby <sup>(b)</sup>		100	01	90						
Kowari®		100		82						
Mitika <sup>(b)</sup>		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 NVT Long Term Yield Reporter

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



### 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 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 <sup>(b)</sup>	MSS	R/S (P)	MSS (P)		VS (P)	I (P)	MRMS (P)	MSS (P)	SVS (P)
Bannister <sup>(b)</sup>	S	MSS	MS	MR	MRMS	MT	MSS	S	MSS-SVS
Bilby®	S	MSS	S	S	S	MI	S	SVS	MS
Brusher <sup>(b)</sup>	SVS	MR	S	MR	S	MT	MSS	SVS	MS
Carrolup	S	S	SVS	VS	S	1	MSS	MSS	SVS
Durack <sup>(b)</sup>	S	S	S	MRMS	S	MT	S	S	SVS
Echidna	S	SVS	MSS	MS	MRMS	MT	SVS	S	MSS
Goldie <sup>(b)</sup>	SVS	SVS	MS	MR	S	1	MS	S	SVS
Kingbale <sup>(b</sup>	MSS	S	MS	R	MR	MT	MSS	MSS (P)	S (P)
Koala <sup>(b)</sup>	MS	MSS	MSS	R	MS	MT	MSS	S	S
Kojonup <sup>(b)</sup>	S	S	MS	VS	MS	MT	MSS	SVS	S
Kowari <sup>(b)</sup>	S	SVS	S	S	S	1	S	S	S
Kultarr <sup>(b)</sup>	SVS (P)	MR (P)	MSS (P)		S (P)	MI (P)	MS (P)	MS (P)	S (P)
Mitika <sup>(b</sup>	S	S	SVS	VS	S	MT	SVS	S	SVS
Mulgara <sup>(b)</sup>	S	MR	MSS	R	MR	MT	S/MS	MSS	SVS
Tungoo	S	MR	MSS	MR	R	MT	MRMS#	S	MRMS
Wallaby®	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 <sup>(b)</sup>	S	MRMS	MSS	S	S	MI	MSS	MSS	MS
Wintaroo	S	S	MS	R	MR	MT	MS#	S	S
Yallara <sup>(b</sup>	S	S	S	R	MS	MI	MSS	S	SVS

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



 $R = resistant, \ MR = \overline{moderately\ resistant}, \ MS = moderately\ susceptible, \ S = susceptible, \ VS = very\ susceptible,$ 

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

<sup>(</sup>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 <sup>1</sup>
DG Avon TT <sup>(b)</sup>	Nutrien Ag Solutions Ltd	5.50	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 1.5 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.
PY525G	Pioneer Hi-Bred Aust	N/A	Pioneer® PY525G is a mid-maturing Optimum GLY® hybrid variety. Suited to mid-season growing regions. Mid-phenology. Medium-tall height. Blackleg resistance rating NA, resistance group NA. Tested in NVT trials 2023. Marketed by Pioneer Seeds.

<sup>\*</sup> EPR amount is ex-GST,  $^{\phi}$  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



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	No trial	No twist			108				
InVigor® R 4520P	INO LIIdi	No trial	112	pron	110				
Pioneer® 44Y30 RR			113	Com	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				

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

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)		No trial	Compromised trial	107	Compromised trial				
Pioneer® 44Y30 RR	No trial			105	isec				
Nuseed® Raptor TF	INO LIIdi			105	pron				
InVigor® R 4022P				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 trial cooperator, CJ Kay & Sons. Learn more via the <u>NVT Long Term Yield Reporter</u>

Table 3: Mt Hope	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	INO LITAL		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 <a href="NVT Long Term Yield Reporter">NVT Long Term Yield Reporter</a>

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 tria	112					
Nuseed® Ceres IMI			125	iised						
Hyola® Continuum CL				pron	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>



**FABA BEAN** 

Table 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		ia					
Hyola® Continuum CL			Compromised trial	96	Compromised trial					
Nuseed® Ceres IMI			simo	93	simc					
Pioneer® 43Y92 (CL)	90	94	mpro	98	id i					
Hyola® 575CL	107		8							
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					

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 <a href="https://linearchyola@norm/norm/yield Reporter">NVT Long Term Yield Reporter</a>

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>

Table 7: Mt Hope med-high rainfall TT.													
Year	2019	2020	2021	2022	2023								
Mean yield (t/ha)		2.15	1.81	2.72	3.18								
Renegade TT <sup>(b)</sup>			98	124	98								
Hyola® Blazer TT		109	114	117	111								
InVigor® T 4510		114	116	114	108								
InVigor® LT 4530P				115	102								
HyTTec® Trophy	No trial	104	120	112	112								
HyTTec® Trifecta	INO LITAT	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 NVT Long Term Yield Reporter

Table 8: Yeelanna med-high rainfall TT.													
Year	2019	2020	2021	2022	2023								
Mean yield (t/ha)	2.42	1.82	2.21		3.20								
HyTTec® Trifecta	113	114	116		113								
HyTTec® Trophy	108	110	119		115								
Hyola® Blazer TT		111	113		113								
InVigor® T 4510	107	111	116	Compromised trial	112								
InVigor® T 4511			113	nisec	110								
PY520TC			108	pron	109								
InVigor® LT 4530P			108	Com	107								
RGT Capacity TT			104		106								
Hyola® Defender CT					109								
Renegade TT <sup>(b)</sup>					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								

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



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	tria	112	tria
Renegade TT <sup>(b)</sup>			nisec	105	iisec
Hyola® Defender CT			pron	107	pron
HyTTec® Trophy	100	118	Compromised trial	109	Compromised trial
RGT Capacity TT				99	
InVigor® T 4511			1	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 <u>NVT Long Term Yield Reporter</u>

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 <sup>(b)</sup>			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								
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. Learn more via the <a href="NVT Long Term Yield Reporter">NVT Long Term Yield Reporter</a>



### 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	2024	2024		Section A –						Se	ection F	? – resis	tance o	roup of	previou	ıs year's	cultiva	r (stubb	le)					
	Blackleg rating	Blackleg rating	Blackleg rating		resistance group of			1			Je	- C.IOII E	10313		Cup OI	Picviot	year s	Cultiva	(31455						
Variety	Bare	ILeVo®	Saltro®	Туре	cultivar	Α	В	С	AB	AC	AD	ABC	ABD	ABF	ABS	ABDF	ABDS	ADF	BF	BC	Н	AH	ACH	ABH	ADF
CONVENTIONAL VAI	RIETIES																								
Outlaw <sup>(b)</sup>	RMR			Open pollinated	А																				
Nuseed® Quartz	RMR			Hybrid	ABD																				
Nuseed® Diamond	RMR	R	R	Hybrid	ABF																				
TRIAZINE-TOLERAN	VARIETIES																								
HyTTec® Trifecta	R			Hybrid	ABD																				
HyTTec® Trident	R			Hybrid	AD																				
Monola® H524TT	R			High stability oil, hybrid	AD																				
DG Bidgee TT <sup>(b)</sup>	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	. Effecti	ve rotati	on with	existing	groups	currently	unknov	vn						
Monola® H421TT	RMR			High stability oil, hybrid	ВС																				
ATR-Bluefin <sup>(b)</sup>	RMR			Open pollinated	AB																				
DG Avon TT®	MR	R	R	Open pollinated	AC																				
SF Spark™ TT	MR	R	R	Hybrid	ABDS																				
InVigor® T 4510	MR	R	R	Hybrid	BF																				
Renegade TT <sup>⊕</sup>	MR			Open pollinated	А																				
HyTTec® Velocity	MR			Hybrid	AB																				
Monola® 422TT	MRMS			Open pollinated	ВС																				
ATR-Swordfish <sup>(b)</sup>	MRMS			Open pollinated	AB																				
SF Dynatron™ TT	MRMS	R	R	Hybrid	ВС																				
RGT Baseline™ TT	MRMS	R	R	Hybrid	В																				
Bandit TT <sup>⊕</sup>	MRMS	R	R	Open pollinated	А																				
RGT Capacity™ TT	MRMS	RMR	R	Hybrid	В																				
AFP Cutubury <sup>(b)</sup>	MS	MR	RMR	Open pollinated	AB																				
ATR-Bonito <sup>(b)</sup>	MS	RMR	R	Open pollinated	А																				



Continued on next page

Table 11: Canola	disease	guide -	- <b>2024</b> a	nutumn blackleg ratings and re	sistance gro	ups (	contin	ued).																	
	2024 Blackleg	2024 Blackleg			Section A – resistance						Se	ection E	B – resis	tance gi	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
IMIDAZOLINONE-TOL	ERANT VA	RIETIES																							
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 AND	TRIAZINE	-TOLERAN	T VARIETIE	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																				



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#### **CANOLA**

Table 11: Canola	disease	guide -	- <b>2024</b> a	utumn 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	АВ	AC	S.	ection E	3 – resis	stance g		s year's	(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	IETIES																			
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  $\underline{\text{NVT Disease Ratings}}$ .



### **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 <sup>(b)</sup>		100	105	100	98								
PBA Marne®		83	100	105	106								
PBA Samira <sup>(b)</sup>		99	99	101	98								
PBA Bendoc <sup>(b*</sup>		108	107	89	94								
PBA Amberley <sup>(b)</sup>	No trial	100	99	99	96								
Fiesta VF		96	97	97	97								
Farah <sup>(b</sup>		97	99	95	96								
Nura <sup>(b)</sup>		107	102	86	91								
PBA Rana <sup>(b)</sup>			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.

Refer to the latest *Crop Sowing Guide* for further information at <a href="nvt.grdc.com.au/resources/crop-sowing-guides">nvt.grdc.com.au/resources/crop-sowing-guides</a>



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

### 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	MSS	S								
Doza	VS	S	S	MSS	MR								
Farah <sup>(b)</sup>	MS	S	S	MS	VS								
FBA Ayla <sup>(b)</sup>		S	S	MRMS	MR								
Fiesta VF	S	S	S	MS	VS								
Nura <sup>(b)</sup>	MR (P)	S	MS	MS	VS								
PBA Amberley <sup>(b)</sup>	MR	S	MRMS	MRMS	VS								
PBA Bendoc <sup>(b)</sup>	MR	S	S	MRMS	VS								
PBA Marne <sup>(b)</sup>	MS	S	MS (P)	MS	MRMS								
PBA Nanu <sup>(b)</sup>		S	S	MRMS	MR								
PBA Nasma <sup>(b)</sup>	S	S	S	MSS	MRMS								
PBA Rana <sup>(b)</sup>	MRMS (P)	S	MS	MS	VS								
PBA Samira®	MR (P)	S	MS	MRMS	S								
PBA Warda <sup>(b)</sup>	S	S	S	MRMS	MRMS								
PBA Zahra <sup>(b</sup>	MRMS	S	MS	MRMS	S								

Learn more via the NVT Disease Ratings. R = Ratin



### **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 <sup>1</sup>
APB Bondi <sup>(b)</sup>	Agriculture Victoria	TBC	APB Bondi <sup>®</sup> (tested as OZP1903) is a Kaspa-type pea with mid-flowering and mid-maturity. APB Bondi <sup>®</sup> combines a number of traits in a semi-leafless and semi-dwarf background. It is rated resistant to moderately resistant to downy mildew; resistant to powdery mildew, pea seed-borne mosaic virus and bean leaf roll virus; tolerant to boron toxicity and moderately tolerant to salinity. It has a high yield potential and wide adaptation. Seed is marketable as Kaspa pea.

<sup>\*</sup> 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



### 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 <sup>(b)</sup>		106	105	106	105								
PBA Noosa <sup>(b)</sup>	No trial	96	99	105	94								
PBA Gunyah <sup>(b)</sup>	No trial		103	94	105								
PBA Oura®		105	97	98	102								
Kaspa		96	106	94	105								
PBA Percy		101	100	95	107								
PBA Wharton <sup>(b)</sup>		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								

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

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 <sup>(b)</sup>		103	102	107	113					
PBA Butler®	101		100	107	110					
PBA Noosa <sup>(b)</sup>	97	102	100	106	106					
PBA Taylor <sup>(b)</sup>	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 <sup>(b)</sup>	100		99	92	96					
PBA Wharton <sup>(b)</sup>	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					

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

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 <sup>(b)</sup>		117	107	111				
PBA Butler®	97		109	108				
PBA Noosa <sup>(b)</sup>	111	103	102	108	tria			
PBA Taylor <sup>(b)</sup>	88	112	100	100	lised			
PBA Percy	107	90	106	100	ргоп			
Kaspa	88	104	98	95	Compromised tria			
PBA Oura <sup>(b)</sup>	99	93	99	96				
PBA Gunyah <sup>(b)</sup>	85		95	90				
PBA Wharton <sup>(b)</sup>	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, BA & JD Heath. Learn more via the <u>NVT Long Term Yield Reporter</u>

Rainfall A-O (mm)

### 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 ( <i>Pratylenchus thornei</i> )		
APB Bondi <sup>(b)</sup>	S	RMR (S)	RMR	RMR	MSS		
GIA Kastar <sup>(b</sup>	S	S	RMR	MR	MS		
GIA Ourstar <sup>(b)</sup>	S (P)	S	S	MRMS	MS		
Kaspa	S	S	S	RMR	MRMS		
PBA Butler <sup>(b)</sup>	MS	S	S	RMR	MRMS		
PBA Gunyah <sup>(b)</sup>	S	S	S	RMR	MRMS		
PBA Noosa <sup>(b)</sup>	S	MS	S	RMR	MRMS		
PBA Oura <sup>(b)</sup>	MS	S	S	MR	MRMS		
PBA Pearl	MS	S	S	MR	MRMS		
PBA Percy	MRMS	S	S	RMR	RMR		
PBA Taylor <sup>(b</sup>	S	S	S	RMR	MRMS		
PBA Twilight <sup>(b)</sup>	S	S	S	MR	MRMS		
PBA Wharton <sup>(b)</sup>	S	S	RMR	MR	MRMS		
Sturt	MS	S	S	MR	MR		

Learn more via the NVT Disease Ratings.

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



### **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 <sup>1</sup>
ALB Terrier <sup>(1)</sup>	Agriculture Victoria		ALB Terrier <sup>(b)</sup> is an imidazolinone herbicide tolerant, small market class red lentil with mid-flowering and maturity characteristics. It is rated RMR to pathotype two of Asochyta, which is the best in its class. It is broadly adapted to various lentil growing regions of Australia.

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

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



### **Lentil variety yield performance – 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 <sup>(h*</sup>		122	114	138	111			
GIA Lightning <sup>()*</sup>		109	109	107	112			
PBA Jumbo2 <sup>(b)</sup>		108	102	132	105			
ALB Terrier®	tria		109	116	102			
PBA KelpieXT <sup>(b*</sup>	Compromised tria	96	91	126	105			
PBA Ace <sup>(b)</sup>	pron	105	94	95	110			
PBA HighlandXT <sup>(b)*</sup>	Com	97	100	108	102			
PBA Hurricane XT <sup>(b*</sup>		100	97	98	99			
GIA Leader <sup>()*</sup>		104	97	93	97			
PBA Bolt <sup>(b)</sup>		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.

### **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 <sup>()</sup> virulent)	Ascochyta blight (Pathotype 1 Nipper <sup>()</sup> virulent)	Botrytis grey mould	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)			
ALB Terrier <sup>(b)</sup>	MR (P)	R	MRMS (P)	MR	MR			
GIA Leader <sup>(b)</sup>	MR (P)	MR (P)	MRMS (P)	MRMS (P)	MR (P)			
GIA Lightning <sup>(b)</sup>	MRMS (P)	R (P)	MS (P)	MRMS (P)	MR (P)			
GIA Metro®	RMR (P)	MR (P)	MRMS (P)	MR (P)	MRMS (P)			
GIA Sire <sup>(b)</sup>	MRMS (P)	R (P)	MS (P)	MRMS (P)	MRMS (P)			
GIA Thunder <sup>(b)</sup>	MRMS (P)	R (P)	MRMS (P)	MR (P)	MR (P)			
Nipper <sup>(b)</sup>	MR	MRMS	MRMS	RMR	MR			
PBA Acerb	MR	R	MS	MR	MRMS			
PBA Bolt <sup>(b)</sup>	MRMS	MR	S	MR	MR			
PBA Hallmark XT <sup>(b)</sup>	MRMS	RMR	MRMS	MR	MRMS			
PBA HighlandXT <sup>(†)</sup>	MR (P)	MR	MS	MR	MRMS			
PBA Hurricane XT <sup>(b)</sup>	MRMS (P)	RMR	MS	MRMS	MRMS			
PBA Jumbo2 <sup>(b)</sup>	RMR	R	MR (P)	MR	MRMS			
DDA KolnioVT/b	MDMC	MDMC	MC	MDMC	MDMC			

Learn more via the NVT Disease Ratings.

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



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

### **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 <a href="https://nvt.grdc.com.au">nvt.grdc.com.au</a> to find trial results for any new varieties released since the publication of this harvest report.

Variety	Breeding company	End point royalty* (\$)	Comments supplied by breeding company <sup>1</sup>
Gidgee <sup>(b)</sup>	Australian Grain Technologies	4.50	A very high and stable yielding alternative to PBA Jurien <sup>®</sup> and Mandelup <sup>®</sup> . Widely adapted but particularly well adapted to the northern and central wheatbelt of WA. Metribuzin tolerant. Reduced risk of seed splitting compared with PBA Jurien <sup>®</sup> . Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly quicker maturity relative to PBA Jurien <sup>®</sup> , slightly slower than Mandelup <sup>®</sup> .
Rosemont <sup>(b)</sup>	Australian Grain Technologies	4.50	A very high yielding alternative to PBA Jurien <sup>(b)</sup> , Coyote <sup>(b)</sup> and Mandelup <sup>(b)</sup> . Best performance in softer-finishing situations and southern WA environments. Unique white flower and faintly speckled seed. Metribuzin tolerant. Excellent early vigour. Reduced risk of seed splitting compared with PBA Jurien <sup>(b)</sup> . Taller plant height, may improve harvestability. Moderately resistant to stem Phomopsis. Good CMV resistance. Slightly slower maturity relative to PBA Jurien <sup>(b)</sup> , slightly quicker than Coyote <sup>(b)</sup> .

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

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



### Lupin variety yield performance - 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 <sup>(b)</sup>		109		103	109				
PBA Bateman®	109	114		103	107				
Rosemont <sup>(b)</sup>				107	103				
PBA Gunyidi <sup>(b)</sup>	107	112	tria	100	105				
Lawler <sup>(b)</sup>		100	iised	104	103				
Jenabillup <sup>(b)</sup>	95	111	oron	100	103				
PBA Jurien®	83	107	Compromised tria	108	100				
PBA Barlock <sup>(b)</sup>	82	110		104	100				
Mandelup <sup>(b)</sup>	96	101		102	100				
Gidgee <sup>(b)</sup>				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 <sup>(b)</sup>	MR	MR	MS	MR	S (P)		
Coyote <sup>(b)</sup>	MRMS	MRMS	MRMS	S	S (P)		
Gidgee <sup>(b)</sup>	RMR	MRMS	S (P)	MR	S (P)		
Jenabillup <sup>(b)</sup>	MS	MRMS	MR	MS	S (P)		
Lawler <sup>(b)</sup>	MR	MRMS	MS	MR	S (P)		
Mandelup <sup>(b)</sup>	MRMS	MRMS	S	MR	S (P)		
PBA Barlock <sup>(b)</sup>	RMR	MRMS	MR	MR	S (P)		
PBA Bateman <sup>(b)</sup>	MRMS	MR	MS	RMR	S (P)		
PBA Gunyidi <sup>(b)</sup>	MRMS	MRMS	MRMS	RMR	S (P)		
PBA Jurien <sup>(b)</sup>	RMR	MS	MRMS	RMR	S (P)		
PBA Leeman <sup>(b)</sup>	MRMS	MRMS	MRMS	MR	S (P)		
Rosemont <sup>(b)</sup>	MRMS	MR	MRMS (P)	MR	S (P)		
Wonga	MR	MR	MR	MR	S (P)		

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

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



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