NVT HARVEST REPORT



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Northern Victoria Southern Region

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

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

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

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

Interpreting long-term yield results

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

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

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

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

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

Figure 1: Locality of NVT trial sites in Northern Victoria from 2019 to 2023.

SOURCE: NVT Online



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



WHEAT

New wheat varieties

The following information is for wheat varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to <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 ⁽¹⁾ 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.
Leverage ⁽⁾	Australian Grain Technologies		TBC	Replacement for EGA Gregory ^Φ , Coolah ^Φ and LRPB Flanker ^Φ . Very high yielding in the early planting window. APH quality classification in the northern zone, with south eastern zone classification pending. Good resistance to major diseases. Mid-slow maturity, suited to late April/early May planting. Good yellow spot resistance. Good physical grain quality characteristics. Shorter plant type than other EGA Gregory ^Φ -type varieties.
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 ⁽⁾ 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.
Sundancer®	Australian Grain Technologies		TBC	An ideal replacement for LRPB Lancer ^(b) . Very high yielding, with excellent yield stability. Suits late April, early May planting. Excellent rust resistance. Medium-short plant type with better straw strength than LRPB Lancer ^(b) . Longer coleoptile than LRPB Lancer ^(b) and other early season varieties. APH classification for the northern zone, with southern eastern zone pending.
Tomahawk CL Plus ⁽)	Australian Grain Technologies		4.15	Scepter ^b -type Clearfield [®] variety with increased yield over Scepter ^b . The highest-yielding Clearfield [®] wheat variety in WA, South Australia and Victoria. Tolerant to Clearfield [®] Intervix [®] herbicide. Similar disease resistance profile to Scepter ^b . Similar grain size and test weight as Scepter ^b . Mid-season maturity, similar to Scepter ^b . 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.

Refer to the latest Crop Sowing Guide for further information at

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



BARLEY

OAT

CANOLA

FABA BEAN

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Wheat variety yield performance – Northern Victoria

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

Table 1: Charlton main season wheat.											
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	4.90	3.83	4.27	6.15	6.97						
Tomahawk CL Plus ^{(b*}				94	118						
LRPB Matador®				97	116						
Sunmaster®		101	104	116	111						
Brumby ^(b)			107	99	111						
Calibre		114	107	94	111						
RockStar ^(b)	116	110	109	98	109						
Sunblade CL Plus®*	109	103	104	109	111						
Ballista ^(b)	113	109	107	104	106						
Soaker®					108						
Scepter	115	107	106	96	112						
Beckom ^(b)	108	105	104	105	108						
Vixen [®]	119	110	108	84	112						
RGT Zanzibar		95	103	134	98						
Kingston [®]	110	106	104	100	107						
Dozer ^(b) CL Plus*					106						
Sowing date	22 May	19 May	19 May	18 May	12 May						
Rainfall J–M (mm)	36	101	117	59	49						
Rainfall A–O (mm)	257	293	263	464	208						

Special thanks to 2023 trial cooperator, Jon Whykes.

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

Table 3: Dookie main season wheat.										
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	2.90	5.84	7.04	7.41	7.30					
RGT Zanzibar	81	111	116	124	103					
Sunmaster®		112	112	110	103					
Tomahawk CL Plus®				101	106					
RockStar ^(b)	115	111	114	101	104					
Sunblade CL Plus ^{(b*}	107	112	112	101	101					
LRPB Matador				91	102					
LRPB Scotch®			113	115	99					
Soaker®					102					
Vixen ^(b)	125	107	106	96	105					
Ballista ^(b)	117	104	104 106		102					
Brumby th			103	102	103					
Beckom ^(b)	111	106	105	104	103					
Boree®		106	108	97	106					
Dozer ^(b) CL Plus*					103					
Scepter	122	106	104	100	102					
Sowing date	17 May	15 May	18 May	25 May	16 May					
Rainfall J–M (mm)	50	123	111	203	91					
Rainfall A–O (mm)	253	408	366	533	388					

Special thanks to 2023 trial cooperator, Alan Shields.

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

Table 2: Diggora main season wheat.											
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	2.22	4.78	5.64	6.52	6.27						
Sting [®]	122				110						
LRPB Beaufort®		98	110		102						
Ballista ^(b)	122	108	109	107	103						
Tomahawk CL Plus ^{(b*}				97	101						
RockStar ^(b)	122	111	113	100	108						
Sunmaster ^(b)		102	105	113	104						
LRPB Scout®	107	105	109	106	103						
Brumby®			106	101	104						
Calibre ^(b)		112	106	97	103						
LRPB Matador®				96	103						
Reilly®	109	105	108	105	104						
Sunblade CL Plus ^{(b*}	99	104	107	106	104						
Beckom ^(b)	106	105	104	105	101						
Scepter®	119	109	105	98	102						
Suncentral®		102	104		98						
Sowing date	17 May	19 May	21 May	24 May	24 May						
Rainfall J–M (mm)	35	138	127	84	73						
Rainfall A–O (mm)	200	320	390	551	312						

Special thanks to 2023 trial cooperator, Anthony Lees.

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

Table 4: Numurkah main season wheat.										
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	7.99	6.46	7.32		7.35					
Tomahawk CL Plus ^{(b*}					112					
RockStar [®]	117	109	115		106					
LRPB Matador®					107					
Sunmaster [®]		110	114		106					
Sunblade CL Plus ^{(b*}	113	109	112		104					
Vixen®	112	104	111	la	107					
Scepter	110	106	110	ed tr	107					
RGT Zanzibar	108	110	113	omis	101					
Ballista®	108	107	109	mpre	106					
Brumby [®]			108	ଥ	108					
Calibre®		106	105		109					
Beckom	106	106	107		105					
Boree ^(b)		103	107		105					
Kingston®	107	105	107		104					
LRPB Scotch			111		95					
Sowing date	30 Apr	18 May	19 May	25 May	15 May					
Rainfall J–M (mm)	39	158	151	133	43					
Rainfall A–O (mm)	176	305	261	498	286					
Irrigation A–O (mm)			70							

Special thanks to 2023 trial cooperator, Craig Reynolds.

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

Table 5: Yarrawonga main season wheat.										
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	3.76	4.86	5.97	5.48	5.87					
RGT Zanzibar	89	102	128	125	102					
Sunmaster ^(b)		110	119	115	106					
Sunblade CL Plus ^{(b*}	99	107	115	106	105					
Tomahawk CL Plus®*				97	111					
LRPB Matador				96	109					
Beckom ^(b)	105	106	106	106	106					
Soaker®					104					
Cutlass®	97	106	110	103	105					
Calibre®		107	97	100	109					
Brumby ^(b)			100	103	106					
Dozer ^{(b} CL Plus*					103					
RockStar ^(b)	110	101	110	92	106					
Scepter®	110	104	102	98	105					
EG Jet ^(b)		96	118	112	96					
Ballista ^(b)	112	97	101	104	103					
Sowing date	19 May	23 May	26 May	3 Jun	11 May					
Rainfall J–M (mm)	24	299	286	272	66					
Rainfall A–O (mm)	198	462	252	627	315					

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

Table 7: Rutherglen early season wheat.											
Year	2019	2020	2021	2022	2023						
Mean yield (t/ha)	5.86	6.48	6.61	4.80	6.67						
RGT Zanzibar	107	114	114	129	113						
LRPB Beaufort®	108	113	115	123	111						
Leverage ^{(b}					115						
BigRed ^(b)			117	135	97						
Sundancer®					111						
Willaura ^(b)			115	100	113						
RGT Cesario ^(b)		108	108 115 131		95						
RGT Accroc ^(b)	96	109	114	126	95						
Stockade ^(b)			109	121	102						
Genie®					108						
LRPB Major®				104	110						
RockStar ^(b)	115	105	101	89	109						
LRPB Scotch®				114	103						
Valiant [®] CL Plus*		103	102	101	105						
Denison®	110	101	100	89	110						
Sowing date	30 Apr	23 Apr	2 May	22 Apr	25 Apr						
Rainfall J–M (mm)	71	151	189	186	209						
Rainfall A–O (mm)	216	403	304	555	415						

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

Table 6: Numurkah early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		7.36	7.28		7.58
RGT Zanzibar		119	112		110
BigRed ^(b)			113		103
LRPB Beaufort®		116	112		110
RGT Accroc ^(b)		117	109		101
Leverage ^{(b}					112
RGT Cesario®		117	109	lial	99
Genie				ed tr	108
RockStar ^(b)	No trial	104	106	Compromis	112
Sundancer®					109
Stockade ^(b)			107		102
LRPB Major®					108
LRPB Scotch®					102
IGW6755					102
Valiant [®] CL Plus*		102	103		104
Willaura [®]			104		109
Sowing date		24 Apr	5 May	2 May	1 May
Rainfall J–M (mm)		158	151	133	43
Rainfall A–O (mm)		305	261	498	286

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



Wheat variety quality – Northern Victoria

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

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

Protein and yield comparisons

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



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



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



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



CANOLA OAT BARLEY



Test weight comparisons

Figure 5: Test weight (kg/hL) comparisons for main season wheat varieties from four NVT sites in northern Victoria in 2022.





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

Test weight (kg/hL)



Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from five NVT sites in northern Victoria in 2023.

Test weight (kg/hL)



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

Test weight (kg/hL)



OAT

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Screenings comparisons

Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from four NVT sites in northern Victoria in 2022.



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

Screenings (%<2.0mm)

∛GRDC



Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from five NVT sites in northern Victoria in 2023.





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

Screenings (%<2.0mm)

4

3

2



Wheat variety disease ratings – Victoria

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

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

Table 8: Wheat disease guide for Victoria.												
Variety	Stem rust	Leaf rust	Stripe rust (east coast resistance)	CCN	Crown rot	Eyespot	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornel)	Septoria tritici blotch	Yellow leaf spot	Black tip (Black point)*	Powdery mildew
Anapurna	MSS	MS	RMR	MRMS	SVS		MS	S (P)	MRMS	MRMS		RMR
Ascot ^{(b}	MRMS	RMR	MSS	MR	S	S	S	S	S	MRMS		S
Ballista ^(b)	MR	S	MSS	MRMS	S	S	S	MRMS	SVS	MS		SVS
Beckom ^(b)	MRMS	MSS	MRMS	R	S		S	MSS	S	MSS		MSS
BigRed [⊕]	S	MRMS	RMR	S	MSS		MS	MS	MR	MR		RMR
Boree	MR	S	SVS	MSS	S		S	MSS	SVS	MRMS		SVS
Brumby®	MR	SVS	MS	MRMS	S	S	MRMS	MS (P)	S	MRMS		MR/S
Calibre ^(b)	MR	S	S	MRMS	S	S	S	MSS	S	MRMS		MSS
Catapult [®]	MR	S	S	R	MSS	S	S	MS	MSS	MRMS		S
Chief CL Plus®	MR	MR	SVS	MS	MSS	MSS	MRMS	MSS	S	MRMS		SVS
Condo [®]	MR	S	MRMS/MS	MR	S		S	MS	S	MS		MR
Coolah ^{(b}	MR	RMR	MSS	S	MSS		S	MS	MSS	MSS		S
Coota	RMR	MR	S	MR	MSS	S	MR	MS	S	MSS		S
Cosmick [®]	MS	SVS	MSS	S	S		MSS	MSS	SVS	MRMS		MSS
Cutlass ^(b)	R	RMR	MSS	MR	S		MSS	MSS	MSS	MSS		MSS
Denison®	MS	S	S	MS	MSS	S	S	S	MSS	MRMS		S
Dozer [®] CL Plus	MS	MSS	S	MS (P)	S	SVS (P)	MRMS	S	S (P)	MS		S
DS Bennett ^(b)	MS	SVS	S	S	VS		S	S	MSS	MRMS		R
DS Faraday®	RMR	RMR	MRMS	MS	MSS		S	MSS	MSS	MSS		
DS Pascal®	MSS	MRMS#	MRMS	S	S		S	S	MSS	MS		RMR
DS Tull®	MR	MSS	MS	MSS	S		MSS	MSS	SVS	S		
EG Jet [®]	S	S	MRMS	MRMS	S		S	S	MSS	MRMS		SVS
EG Titanium	MS	MS	MR	R	MSS	S	MSS	MSS	MSS	MSS		S
EGA Gregory ^{(b}	MR	MR	MS	S	S		S	MSS	MSS	S		RMR
EGA Wedgetail®	MRMS	MSS	MS	S	S		S	VS	MSS	MSS		MRMS
Einstein	S	S	RMR	S	S (P)		MRMS	S	MSS	MR		
Emu Rock®	MS	SVS	SVS	S	MSS		MSS	S	S	MS		MSS
Genie®	MS (P)	S (P)	MRMS (P)						S (P)	MRMS (P)		SVS (P)
Hammer CL Plus®	MR	S	MS	MRMS	MSS	S	MSS	S	MSS	MRMS		S
Hyperno®	RMR	RMR	MR	MS	SVS		MS	RMR	MSS	MRMS		RMR
IGW6755	MRMS	MS	MSS	MSS	S	MSS (P)	MSS	MR	MSS	MRMS		S
Illabo ^{(b}	MRMS	S	MRMS	MRMS	S	S	MSS	MSS	MSS	MS		R
Jillaroo⊕	MS	S	MSS	MS	S	S	S	MS (P)	S	MS		SVS
Kingston ^{(b}	S	S	MSS	R	S	S	S	MRMS	S	MSS		S
Leverage®	MR	RMR#	MRMS	MS (P)	S	S (P)	S	MS	S	MRMS		S
Longford	RMR	RMR	RMR	MS	MSS	MSS (P)	S	S	MRMS/S	MRMS		RMR
Longsword®	MR	MS	MRMS/MS	MRMS	MSS	S	MRMS	MRMS	MS	MRMS		S
LRPB Anvil® CL Plus	MR	SVS	S	MS	MSS	S	MSS	S	VS	MSS		SVS
LRPB Avenger®	MS	S	S	MRMS	S	S	MSS	MRMS	S	MS		SVS
LRPB Bale®	MRMS	MSS	MRMS	R	S	S	S	S	MSS	SVS		MS

Continued on next page

Table 8: Whea	t disease	guide fo	r Victoria	(continu	ed).							
Variety	Stem rust	Leaf rust	Stripe rust (east coast resistance)	CCN	Crown rot	Eyespot	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	Septoria tritici blotch	Yellow leaf spot	Black tip (Black point)*	Powdery mildew
LRPB Beaufort®	SVS	MSS	RMR	MS	S		MS	MSS	S	MRMS		RMR
LRPB Dual [®]	MRMS	MSS	MS	R	S	S	MSS	MSS	MSS	S		S
LRPB Havoc [®]	S	S	MSS	S	MSS		S	MSS	MSS	MRMS		S
LRPB Hellfire®	MR	MSS	MR	MS	MSS		MSS	MSS	S	MSS		S
LRPB Impala®	MR	SVS	MRMS	MSS	MSS		SVS	S	SVS	MSS		R
LRPB Kittyhawk®	MRMS (S)	MR	MR	S	SVS	S	S	S	MRMS	MRMS		MS
LRPB Lancer®	R	RMR	RMR	S	MSS		S	MS	MS	MS		R
LRPB Major®	MRMS	MR#	MRMS	MRMS (P)	S	S (P)	MSS	MSS	MSS	MS		MS
LRPB Matador®	MS	MSS	MS	MS (P)	S	S (P)	S	MRMS	S (P)	MRMS		MS
LRPB Mustang®	MRMS	MSS	MR	MR	MSS		S	MSS	S	MSS		MSS
LRPB Nighthawk®	RMR	MSS	MR	MS	MSS		MSS	MS	MS	MS		SVS
LRPB Oryx ^(b)	MR	RMR#	MS	S	MSS	S	MSS	MSS	SVS	MSS		MR
LRPB Parakeet®	MR	R	MR	MS	MSS	S	MRMS	S	SVS	MSS		SVS
LRPB Raider®	RMR	RMR	MR	S	S		MSS	MS	S	MSS		S
LRPB Scotch®	MSS	MR#	MRMS	MS	S	S	MS	S	S	MRMS		MR
LRPB Scout	MRMS	MS	MS	R	S		S	MSS	S	SVS		MRMS
LRPB Stealth®	R	RMR#	RMR	S	MSS		MSS	S	MSS	MS		MS
LRPB Trojan®	MRMS	MR#	S	MS	MS	MS	MSS	MSS	S	MSS		S
Mace	MRMS	S	SVS	MRMS	S	S	MS	MS	SVS	MRMS		MSS
Manning®	MR	MSS	RMR	S	VS	MS (P)	MSS	S	MRMS/S	MRMS		MS
Razor CL Plus®	MRMS	S	MRMS	MR	S	S	S	MS	SVS	MSS		MSS
Reilly®	MRMS	MSS	MS	R	S	S	MS	MSS	S	S		MSS
RGT Accroc [®]	MS	SVS	RMR	S	SVS	MSS (P)	MS	MSS	MS	MRMS		MSS
RGT Calabro	MS	MSS	RMR	S	SVS		S	MS	MRMS	MR		RMR
RGT Cesario®	RMR	RMR	RMR	MSS (P)	VS		MRMS	MSS	MRMS	MR		RMR
RGT Waugh ⁽⁾	MS	S	RMR	MS	S		MSS	MSS	MRMS#	MRMS		R
RGT Zanzibar	VS	SVS	MR	MSS	S		S	MS (P)	MSS	MS		RMR
RockStar ^{(b}	MRMS	S	S	MSS	S	S	MRMS	MS	S	MRMS		SVS
Saintly®	MS	RMR	MRMS	S	VS (P)		MS	RMR	MRMS/S	MRMS		S
Scepter®	MRMS	MSS	MSS	MRMS	MSS	S	S	MSS	S	MRMS		SVS
Severn®	MS	MRMS	RMR	MSS (P)	S		S	MRMS	MSS	MRMS		RMR
Sheriff CL Plus ^{(b}	MS	SVS	SVS	MS	S	S	MRMS	MRMS	S	MRMS		SVS
Soaker®	MR (P)	S (P)	MS (P)						S (P)	MS (P)		S (P)
SQP Revenue®	RMR	VS	MR	S	S	S	S	S	MSS	MRMS		R
Sting®	MRMS	SVS	S	MS	MSS		MS	MS	SVS	MRMS		SVS
Stockade®	MS	MR	MR	MRMS	S		S	MSS	MS	MRMS		SVS
Sunblade CL Plus®	MS	MSS	MRMS	MSS	S		MSS	MRMS	S	MSS		S
Suncentral®	MRMS	RMR		S	MSS		MRMS	MRMS	S	MSS		SVS
Sundancer®	MR	RMR	MR	MS (P)	MSS		MSS	MS	MSS	MS		S
Sunflex®	MR	RMR#	MRMS	MS	MSS		S	MSS	SVS	MS		S
Sunmaster ^(b)	MS	RMR	MRMS	MSS	MSS		MRMS	MS	S	MSS		MSS
Sunprime®	MS	MR#	MS	MS	MSS		S	S	S	MSS		
Suntop ^(b)	MRMS	MR	MRMS	S	MSS		S	MRMS	MSS	MSS		S
Tomahawk CL Plus®	MR	S	MSS	MRMS (P)	S	S (P)	S	MS	S (P)	MRMS		SVS
Valiant [®] CL Plus	MR	S	S	MSS (P)	MSS	MSS	S	S (P)	MSS	MRMS		VS
Vixen®	MRMS	SVS	SVS	MSS	S	S	MRMS	MS	S	MRMS		SVS
Willaura [⊕]	MR	MRMS	S	MS	S		MSS	MRMS	S	MS		SVS
Yitpi	S	S	MS	MR	S		MSS	S	S	SVS		MS

Continued on next page



Table 8: Wheat disease guide for Victoria (continued).												
Variety	Stem rust	Leaf rust	Stripe rust (east coast resistance)	CCN	Crown rot	Eyespot	RLN resistance (Pratylenchus neglectus)	RLN resistance (Praty/enchus thornel)	Septoria tritici blotch	Yellow leaf spot	Black tip (Black point)*	Powdery mildew
DURUM												
Caparoi®	MR	RMR	MS	MRMS (P)	VS		MS	MR	MRMS/S	MR		S
DBA Bindaroi®	MR	MR	MS	MS	SVS		MRMS	MR	MS	MS		MSS
DBA Lillaroi®	RMR	RMR	MS	S	SVS		MRMS	RMR	S	MRMS		MS
DBA Mataroi ⁽⁾	MRMS	MR	MS	MRMS	SVS		MS	RMR	MSS	MRMS		S
DBA Spes	R	RMR	MS	MS	VS		MRMS	RMR	S	MRMS		S
DBA Vittaroi®	MR	RMR	MS	S	SVS		MS	MR	MSS	MRMS		MS
DBA-Artemis®	MR	RMR	MRMS	MS	SVS		MS	MR	MRMS/S	MRMS		SVS
DBA-Aurora®	RMR	RMR	MRMS	MSS	SVS		MRMS	RMR	MRMS/S	MRMS		MSS
Jandaroi	MRMS	MR	MRMS	MS	VS		MS	MRMS	MSS	MRMS		MS
Patron	RMR	MR#	MRMS	S	SVS		MRMS	MR	MRMS	MRMS		MSS
Westcourt ^(b)	RMR	RMR	MR	MSS	VS		MS	MR	S	MRMS		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, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes, () show outlier.

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New barley varieties

The following information is for barley varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to <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 ^(b) CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to medium- high rainfall environments. Neo ^(b) CL provides an outstanding disease resistance profile with excellent resistance to cereal cyst nematode, powdery mildew and the spot form of net blotch, and useful resistance to the net form of net blotch and leaf scald. Neo ^(b) CL has a semi-prostrate early growth habit, medium plant height, good tolerance to lodging, good grain retention and tolerance to head loss, and very good levels of grain plumpness. Neo ^(b) CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025.
Spinnaker®	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.

OAT

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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 – Northern Victoria

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

Table 1: Charlton main season barley.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)		4.38	4.52	7.34	6.67				
Neo ^(b) CL*					124				
Combat [®]			117	114	110				
Cyclops ^(b)		109	108	106	114				
Minotaur®		107	105	108	115				
Spinnaker®				112	109				
RGT Planet®	lei	103	105	112	108				
Rosalind®	ed tr	104	107	106	110				
Zena ^{(b} CL*	omis		103	109	107				
Laperouse ^(b)	mpre	103	100	98	108				
Yeti [®]	ଥ	102	101	98	105				
Maximus [®] CL*		101	99	95	110				
La Trobe®		101	103	97	102				
Spartacus CL ^{(b*}		100	100	95	106				
Titan AX ^{(b*}				99	90				
Bottler ^(b)		97	97	102	98				
Sowing date	22 May	19 May	19 May	18 May	12 May				
Rainfall J–M (mm)	36	101	117	59	49				
Rainfall A–O (mm)	257	293	263	464	208				

Special thanks to 2023 trial cooperator, Jon Whykes.

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

Table 3: Yarrawonga main season barley.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	5.63	5.08	5.33	5.72	6.23				
Neo ^{(b} CL*					112				
RGT Planet®	110	105	103	112	111				
Spinnaker®				111	109				
Zena ⁽⁾ CL*			102	111	109				
Rosalind [®]	106	108	105	108	103				
Minotaur®		108	108	106	103				
Fandaga [®]			101	107	109				
Combat [⊕]			99	103	104				
Bottler [®]	101	101	101	106	104				
Cyclops ^(b)		105	105	101	100				
Yeti ^(b)	95	108	107	102	94				
Alestar®	97	99	100	102	103				
Maximus [®] CL*	93	108	107	100	95				
Kiwi	98	98	99	102	102				
Laperouse®	94	105	106	98	95				
Sowing date	19 May	23 May	26 May	3 Jun	11 May				
Rainfall J–M (mm)	24	299	286	272	66				
Rainfall A–O (mm)	198	462	252	627	315				

Special thanks to 2023 trial cooperator, Inchbold Farming.

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

Table 2: Colbinabbin main season barley.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	3.98		5.93	6.39	7.09				
Neo ^(b) CL*					123				
RGT Planet®	104		117	117	110				
Spinnaker®				115	110				
Combat ^(b)			114	109	109				
Zena ^{(b} CL*			114	114	108				
Minotaur®			106	104	111				
Rosalind	107		104	106	103				
Cyclops ^(b)		lrial failed	102	98	108				
Bottler®	95	luneu	105	107	103				
Alestar®	91		101	102	101				
Buff ^(b)	105		100	97	96				
La Trobe®	105		96	95	95				
Titan AX ^{(b*}				94	94				
Commander	99		96	92	99				
Fathom	105		96	96	92				
Sowing date	25 May	18 May	20 May	23 May	25 May				
Rainfall J–M (mm)	27	162	119	89	119				
Rainfall A–O (mm)	230	389	306	580	291				

Special thanks to 2023 trial cooperator, Darryl Rathjen.

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



Barley variety quality – Northern Victoria

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

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

Protein and yield comparisons

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



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



Test weight comparisons



Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from three NVT sites in northern Victoria in 2022.

Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from three NVT sites in northern Victoria in 2023. Test weight (kg/hL)

75 74 73 72 71 70 69 68 67 66 65 Cyclops^(b) Yeti^(b) Spartacus CL^(b) Maximus^(b) CL Bottler^(b) Minotaur^(b) Commodus^(b) CL Rosalind[⊕] RGT Planet^(b) Titan AX^(b) Buff^(b) La Trobe^(b) Laperouse^(h) Beast^(b) Spinnaker^{(b} Alestar^(b) Compass^(b) Leabrook^{(h} Commander^d Combat^d CANOLA OAT BARLEY WHEAT

Screenings comparisons

Figure 5: Screenings (<2.2mm) comparisons for main season barley varieties from three NVT sites in northern Victoria in 2022.



Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from three NVT sites in northern Victoria in 2023.





Retention comparisons

Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from three NVT sites in northern Victoria in 2022.





Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from three NVT sites in northern Victoria in 2023.

Retention (%>2.5mm)



Barley variety disease ratings - Victoria

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

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

Table 4: Barley disease	e guide for	Victoria.							
Variety	Leaf scald	Spot form net blotch	Net form net blotch*	Leaf rust	CCN	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	Ramularia	Powdery mildew
Alestar®	SVS	S		MS	R^ (P)	MR	MR	SVS	MR
Banks [®]	SVS	S		S	S	MS	MR	VS	MS
Bass®	S	MSS		SVS	S	MS	MRMS	VS	S
Beast ^(b)	SVS	MS		S	MR	MRMS	MRMS	SVS	S
Bottler	SVS	MSS		MRMS		MS	RMR	SVS	RMR
Buff ^(b)	SVS	MSS		SVS		MRMS	MS	SVS	S
Combat ^(b)	S	RMR		S	MR	MRMS	MS	SVS	MS
Commander ^(b)	SVS	MSS		SVS	R	MRMS	MRMS	SVS	MSS
Commodus ^(b) CL	SVS	MSS		S	R	MRMS	MRMS	SVS	MSS
Compass ^(b)	SVS	MS		SVS	R	MRMS	MR	SVS	S
Cyclops ^(b)	S	MS		SVS	S	MRMS	MRMS	SVS	SVS
Fairview®	SVS	S		S		MR	MR	SVS	R
Fandaga®	SVS	S		MSS	R	MR	MR	VS	R
Fathom ^(b)	S	RMR		MS	R	MRMS	MR	SVS	MRMS
Flinders®	SVS	S		S	S	MRMS	MR	SVS	RMR
Keel	SVS	MR		SVS	R	MS	MRMS	SVS	S
Kiwi	SVS	MSS		MSS	S	MRMS	RMR	VS	RMR
La Trobe®	SVS	S		S	R	MRMS	MRMS	SVS	MSS
Laperouse ^(b)	VS	MRMS		SVS	S	MRMS	MR	VS	MSS
Leabrook®	SVS	MS		SVS	RMR	MRMS	RMR	VS	S
Litmus [®]	VS	S		SVS	MS	MS	MRMS	VS	MS
Maximus [®] CL	SVS	MS		S	R	MRMS	MRMS	VS	S
Minotaur®	VS	S		VS	R	MRMS	MRMS	SVS	S
Neo ^(b) CL	S (P)	MR (P)		S (P)	R	RMR (P)	MR (P)	SVS (P)	RMR (P)
RGT Planet ^(†)	SVS	SVS		MRMS	R (P)	MRMS	MR	SVS	RMR
Rosalind [®]	S	S		MRMS	R	MRMS	MRMS	VS	MSS
SakuraStar	SVS	MS		S	R	MR	MR	SVS	MSS
Scope CL ^(b)	SVS	MSS		S	S	MRMS	MRMS	SVS	MRMS
Spartacus CL ^(b)	SVS	S		S	R	MRMS	MRMS	VS	MSS
Spinnaker®	S	SVS		S	S	MR	MS	VS	RMR
Titan AX [⊕]	VS	MS		SVS	MR (P)	MR	MR	VS	MSS
Topstart	SVS	S		MRMS	S	RMR	RMR	SVS	RMR
Urambie	MS	S		S		MRMS	MR	VS	MS
Westminster	SVS	S		MRMS		MRMS	MS	SVS	RMR
Yeti ^(h)	VS	MS		SVS	RMR	MR	MR	VS	S
Zena ^(b) CL	S	S		MS	R	MRMS	MR	VS	RMR

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

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



WHEAT

OAT

New oat varieties

The following information is for oat varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to <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
Archer	InterGrain	TBC	Variety description not supplied.
Kingbale [®]	InterGrain	TBC	Variety description not supplied.
Kultarr [®]	InterGrain	TBC	Variety description not supplied.
Wallaby ^(b)	InterGrain	TBC	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.



WHEAT

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Oat variety yield performance – Northern Victoria

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

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

Table 1: Diggora	Table 1: Diggora oat.									
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	2.19	5.06	5.50	4.29	6.10					
Koala®	106	108	123	105	107					
13008-18			116	108	106					
Bannister ^{(b}	107	105	115	105	105					
Echidna	91	103	109	106	103					
Bilby®	104	100	102	105	101					
Wallaby®					101					
Williams®	85	103	102	100	102					
Archer ^{(b*}					104					
Kowari®	102	97	95	101	98					
Mitika®	97	96	89	97	96					
Sowing date	17 May	19 May	21 May	24 May	24 May					
Rainfall J–M (mm)	35	138	127	84	73					
Rainfall A–O (mm)	200	320	390	551	312					

Table 2: Dookie oat.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	2.87	4.20	5.16	4.09	4.83				
13008-18			127	110	113				
Bannister ^(b)	99	106	123	105	106				
Koala®	84	110	133	97	102				
Bilby®	112	105	109	104	107				
Echidna	90	110	120	100	103				
Archer ^{(b*}					96				
Kowari®	111	101	96	99	103				
Williams®	90	96	99	119	98				
Wallaby ^{(b}					97				
Mitika [®]	106	96	84	98	98				
Sowing date	17 May	15 May	19 May	17 May	16 May				
Rainfall J–M (mm)	50	123	111	203	91				
Rainfall A–O (mm)	253	408	366	533	388				
Special thanks to 2023 trial	cooperator, A	lan Shields.							

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

Special thanks to 2023 trial cooperator, Anthony Lees.

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

Table 3: Eastville	Table 3: Eastville oat.									
Year	2019	2020	2021	2022	2023					
Mean yield (t/ha)	1.79	4.26	6.51	6.37	3.14					
Archer ^{(b*}					97					
Koala®	108	112	120	100	101					
13008-18			111	96	109					
Bannister [®]	112	108	112	101	103					
Williams®	108	105	106	107	98					
Echidna	100	104	106	107	102					
Wallaby®					98					
Bilby®	106	100	99	102	105					
Kowari®	99	96	93	100	102					
Mitika [®]	93	94	90	99	99					
Sowing date	20 May	18 May	20 May	23 May	25 May					
Rainfall J–M (mm)	34	88	165	212	60					
Rainfall A–O (mm)	363	336	264	602	249					

Special thanks to 2023 trial cooperator, Doug Curnow.

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

WHEAT

Oat variety disease ratings – Victoria

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

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

Table 4: Oat disease guide for Victoria.											
Variety	Leaf rust (crown rust)*	Stem rust*	Bacterial blight	Barley yellow dwarf virus (BYDV)	CCN	Red leather leaf	Septoria blotch				
Archer			MSS (P)	MSS (P)		SVS (P)	MRMS (P)				
Bannister [®]			S	MS	MR	MSS-SVS	MSS				
Bilby®			SVS	S	S	MS	S				
Brusher®			SVS	S	MR	MS	MSS				
Carrolup			MSS	SVS	VS	SVS	MSS				
Durack [®]			S	S	MRMS	SVS	S				
Echidna			S	MSS	MS	MSS	SVS				
Goldie ^(b)			S	MS	MR	SVS	MS				
Kingbale®			MSS (P)	MS	R	S (P)	MSS				
Koala®			S	MSS	R	S	MSS				
Kojonup ^{(b}			SVS	MS	VS	S	MSS				
Kowari®			S	S	S	S	S				
Kultarr®			MS (P)	MSS (P)		S (P)	MS (P)				
Mitika®			S	SVS	VS	SVS	SVS				
Mulgara ^{(b}			MSS	MSS	R	SVS	S/MS				
Tungoo [®]			S	MSS	MR	MRMS	MRMS#				
Wallaby®			MSS (P)	MS (P)		SVS (P)	MS (P)				
Wandering			S	MSS	VS	S	MSS				
Williams®			MSS	MSS	S	MS	MSS				
Wintaroo			S	MS	R	S	MS#				
Yallara®			S	S	R	SVS	MSS				

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

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





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.

Breeding company	End point royalty* (\$)	Comments supplied by breeding company ¹
Nutrien Ag Solutions Ltd	TBC	Early, determinant, short TT open pollinated variety suited to low-medium rainfall zones.
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.
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.
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.
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	N/A	Monola® H524TT is an early-mid maturing TT hybrid with excellent early vigour. It is Nuseed's second Monola TT hybrid with improved yield and oil profile. It has demonstrated competitive yield and oil content to commercial canola TT hybrids during trials and exhibits strong early vigour and good early biomass. Suited to medium to slow canola growing regions, Monola® H524TT demonstrates strong blackleg resistance and good harvestability. Limited commercial release in 2024.
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.
Pioneer Hi-Bred Aust		Variety description not supplied.
Pioneer Hi-Bred Aust		Variety description not supplied.
Pioneer Hi-Bred Aust		Variety description not supplied.
Pioneer Hi-Bred Aust		Variety description not supplied.
Pioneer Hi-Bred Aust		Variety description not supplied.
	Breeding company Nutrien Ag Solutions Ltd Nutrien Ag Solutions Ltd Advanta Seeds Advanta Seeds BASF Australia Ltd Nuseed Nuseed Pioneer Hi-Bred Aust Pioneer Hi-Bred Aust	End point royalty*Breeding companyTBCNutrien Ag Solutions LtdTBCNutrien Ag Solutions LtdN/AAdvanta SeedsN/AAdvanta SeedsN/AAdvanta SeedsN/ABASF Australia LtdN/ANuseedN/ANuseedN/APioneer Hi-Bred Aust

* 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 – Northern Victoria

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

Table 1: Charlton med-high rainfall GLY.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	2.58	2.64	2.67	3.17	2.99				
InVigor [®] R 4520P	109	108	106	114	114				
InVigor [®] LR 4540P				110	113				
Nuseed® Hunter TF			105	105	107				
Pioneer® 44Y30 RR					106				
InVigor [®] R 4022P	102	101	99	104	108				
PY422G					101				
PY525G					99				
PY424GC					102				
PY323G					100				
DG Drummond TF					97				
Sowing date	9 May	4 May	5 May	22 Apr	25 Apr				
Rainfall J–M (mm)	36	101	117	59	49				
Rainfall A–O (mm)	257	293	263	464	208				

 Table 2: Diggora med-high rainfall GLY.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.23	3.09	3.40	3.42	3.96
InVigor [®] R 4520P	123	110	104	119	107
InVigor [®] LR 4540P				113	107
Nuseed [®] Hunter TF				107	105
Pioneer® 44Y30 RR					103
InVigor [®] R 4022P	113	105	98	106	103
PY525G					101
PY422G					100
PY424GC					100
Hyola® Regiment XC			109		103
PY323G					100
Sowing date	6 May	5 May	5 May	25 Apr	26 Apr
Rainfall J–M (mm)	33	138	127	84	73
Rainfall A–O (mm)	199	320	390	551	312

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

Learn	more	via	the	NVT	Long	Term	Yield	Reporter

Table 3: Wunghnu med-high rainfall GLY.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	1.01	2.62	3.39	3.22	1.84				
InVigor [®] R 4520P	133	118	101	110	111				
Pioneer® 45Y28 RR		106	111	110	103				
Nuseed® Hunter TF				104	105				
InVigor [®] LR 4540P				103	107				
Nuseed® Eagle TF				110	102				
PY525G					105				
Hyola® Regiment XC			112	95	108				
Pioneer® 44Y30 RR		103			102				
PY422G					100				
InVigor [®] R 4022P	123	106	93	97	104				
Sowing date	5 May	21 Apr	6 May	2 May	2 May				
Rainfall J–M (mm)	5	158	112	121	91				
Rainfall A–O (mm)	194	305	264	479	388				

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

Table 4: Yarrawonga med-high rainfall GLY.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.77	3.58	2.87	2.77	2.31			
InVigor [®] R 4520P	127	105	106	113	112			
InVigor [®] LR 4540P				105	104			
Nuseed [®] Hunter TF				104	103			
PY525G					110			
Hyola® Regiment XC			110	91	110			
Pioneer® 45Y28 RR		106	105	109	104			
Nuseed [®] Eagle TF				109	103			
Pioneer® 44Y30 RR		104			99			
InVigor [®] R 4022P	117	99	100	99	104			
PY422G					103			
Sowing date	7 May	28 Apr	3 May	3 May	4 May			
Rainfall J–M (mm)	24	299	286	272	66			
Rainfall A–O (mm)	198	462	252	627	315			

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



Table 5: Charlton med-high rainfall IMI.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.54	2.67	2.89	2.93	3.12
PY421C					116
Pioneer [®] 44Y94 CL		112	110	118	108
Pioneer® 45Y95 (CL)					107
Hyola® Continuum CL				109	101
Hyola® Solstice CL			106	91	104
Pioneer® 43Y92 (CL)	102	102			101
Nuseed [®] Ceres IMI				90	101
Hyola® Equinox CL		98	100	86	
PY520TC					93
VICTORY® V75-03CL					92
Sowing date	9 May	4 May	5 May	22 Apr	25 Apr
Rainfall J–M (mm)	36	101	117	59	49
Rainfall A–O (mm)	257	293	263	464	208

Special thanks to 2023 trial cooperator, Jon Whykes.

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, Hyola® Enforcer CT and Hyola® Regiment XC.

Learn more via the NVT Long Term Yield Reporter

Table 7: Wunghnu med-high rainfall IMI.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	0.78	2.78	3.23	3.40	2.09			
PY421C				121	114			
Pioneer® 45Y95 (CL)				120	108			
Pioneer® 44Y94 CL	114	108	115	119	104			
Pioneer® 45Y93 CL	106	111		122	105			
Hyola® Solstice CL			118	95	111			
Hyola® Continuum CL				111	99			
Hyola® Equinox CL		107	107	87				
Nuseed [®] Ceres IMI			105	87	100			
PY520TC				102	97			
VICTORY® V75-03CL	76	87			92			
Sowing date	5 May	21 Apr	6 May	2 May	2 May			
Rainfall J–M (mm)	5	158	112	121	91			
Rainfall A–O (mm)	194	305	264	479	388			

Special thanks to 2023 trial cooperator, Craig Reynolds. 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, Hyola® Enforcer CT and Hyola® Regiment XC.

Learn more via the NVT Long Term Yield Reporter

Table 6: Diggora med-high rainfall IMI

33		9			
Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.04	3.21	3.41	3.33	3.66
PY421C					112
Pioneer® 45Y95 (CL)					108
Pioneer® 44Y94 CL		109	111	120	107
Hyola [®] Solstice CL			113	95	108
Hyola® Continuum CL				109	102
Pioneer® 43Y92 (CL)	99	102			101
Hyola® Equinox CL		99	105	88	
Nuseed [®] Ceres IMI				89	102
PY520TC					96
VICTORY® V75-03CL					93
Sowing date	6 May	5 May	5 May	25 Apr	26 Apr
Rainfall J–M (mm)	33	138	127	84	73
Rainfall A–O (mm)	199	320	390	551	312

Special thanks to 2023 trial cooperator, Anthony Lees.

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, Hyola® Enforcer CT and Hyola® Regiment XC.

Learn more via the NVT Long Term Yield Reporter

Table 8: Yarrawonga med-high rainfall IMI.								
Year	2019	2020	2021	2022	2023			
Mean yield (t/ha)	1.51	3.20	2.72	2.95	2.05			
PY421C				124	118			
Pioneer® 45Y95 (CL)	114		108	120	109			
Hyola [®] Solstice CL				91	114			
Pioneer® 45Y93 CL	105	104	106	124	109			
Pioneer® 44Y94 CL	112	111	102	120	101			
Hyola® Continuum CL				111	95			
Hyola® Equinox CL		107	107	84				
Nuseed [®] Ceres IMI			97	85	94			
PY520TC				102	101			
VICTORY® V75-03CL	79	91			90			
Sowing date	7 May	28 Apr	3 May	3 May	4 May			
Rainfall J–M (mm)	24	299	286	272	66			
Rainfall A–O (mm)	198	462	252	627	315			

Special thanks to 2023 trial cooperator, Inchbold Farming. 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, Hyola® Enforcer CT and Hyola® Regiment XC.

Learn more via the NVT Long Term Yield Reporter

Table 9. Charlon med-nigh fainfail 11.									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	2.04	2.31	2.66	2.91	2.95				
Hyola® Blazer TT		113	112	116	108				
HyTTec® Trifecta			112	111	107				
Hyola® Defender CT				118	105				
SF Dynatron TT	110	110	108	115	108				
PY520TC					104				
RGT Baseline® TT				115	105				
HyTTec [®] Trophy	111	110	109	108	105				
RGT Capacity TT	108	106	105	111	108				
Renegade TT [®]				115	112				
InVigor® T 4510	108	107	105	106	106				
Sowing date	9 May	4 May	5 May	22 Apr	25 Apr				
Rainfall J–M (mm)	36	101	117	59	49				
Rainfall A–O (mm)	257	293	263	464	208				

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Table 10. Diggora mea nightaintaintaintaintai									
Year	2019	2020	2021	2022	2023				
Mean yield (t/ha)	1.10		3.24	3.07	3.47				
HyTTec® Trifecta			115	115	109				
Hyola® Blazer TT			113	120	108				
Hyola® Defender CT				121	105				
SF Dynatron TT	108		108	118	106				
RGT Baseline® TT		Trial	107	119	105				
PY520TC		failed			105				
HyTTec [®] Trophy	105		112	110	106				
RGT Capacity TT	116		104	114	105				
InVigor® T 4511			107	108	105				
Renegade TT [®]			95	118	104				
Sowing date	6 May	5 May	5 May	25 Apr	26 Apr				
Rainfall J–M (mm)	33	138	127	84	73				
Rainfall A–O (mm)	199	320	390	551	312				

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

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

Table 11: Wunghnu med-high rainfall TT.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.02	2.76	2.95	3.16		
HyTTec® Trifecta		116	121	117		
Hyola® Blazer TT		113	118	121		
PY520TC				120		
Hyola® Defender CT				123	tria	
RGT Baseline® TT			107	120	lisec	
SF Dynatron TT	113	108	110	116	bron	
HyTTec [®] Trophy	107	107	118	111	Com	
InVigor® T 6010	114	116	100	114		
RGT Capacity TT	116	112	103	110		
InVigor® T 4511			110	106		
Sowing date	5 May	21 Apr	6 May	2 May	2 May	
Rainfall J–M (mm)	5	158	112	121	91	
Rainfall A–O (mm)	194	305	264	479	388	

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

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Table 12: Yarrawonga med-high rainfall TT.						
Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.50	2.94	2.50	2.40	2.16	
HyTTec® Trifecta	117	116	111	119	111	
Hyola® Blazer TT		113	107	125	107	
InVigor® T 6010	116	103	111	120	117	
RGT Baseline® TT			109	126	112	
RGT Capacity TT	117	105	106	114	109	
PY520TC			104	123	103	
SF Dynatron TT	113	108	103	119	103	
Hyola® Defender CT				127	101	
HyTTec® Trophy	110	113	104	111	101	
InVigor® T 4511			104	107	104	
Sowing date	7 May	28 Apr	3 May	3 May	4 May	
Rainfall J–M (mm)	24	299	286	272	66	
Rainfall A–O (mm)	198	462	252	627	315	
Special thanks to 2023 trial cooperator, Inchbold Farming.						

Learn more via the NVT Long Term Yield Reporter

Table 10. Diggora med-high rainfall TT

Australian canola variety disease ratings

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

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

Table 13: Canola disease guide	e – autumn 2024	4 ratings.		
	2	024 autumn blackleg ra		
Variety	Bare	Fluopyram (e.g. ILeVO®)	Pydiflumetofen (e.g. Saltro®)	Туре
CONVENTIONAL VARIETIES				
TRIAZINE-TOLERANT VARIETIES		-		
	The autum	nn 2024 blackleg	ı disease ratings w	vill be
	added to t	his report when t	hey become avai	lable.
	The most	recent published	ratings are availa	ble
	using the [Blackleg Manage	ement Guide or the	e
		<u>ase Ratings tool.</u>		
INIDALOEINONE-TOLEKANT VARIETIES				

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>.

Continued on next page

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CANOLA

Table 13: 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					
GLIPHOSAIE-TOLERANT VARIETIES						
	 The autumn 2024 blackleg disease ratings will be added to this report when they become available. The most recent published ratings are available using the <u>Blackleg Management Guide</u> or the <u>NVT Disease Ratings tool</u>. 					
GLYPHOSATE AND IMIDAZOLINONE-TO	OLERANT VARIETIES					
GLUFOSINATE AND TRIAZINE-TOLERA	NT VARIETIES					

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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Faba bean variety yield performance – Northern Victoria

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

Table 1: Dookie faba bean.							
Year	2019	2020	2021	2022	2023		
Mean yield (t/ha)		4.03	5.22	3.67	3.39		
PBA Samira®		100	102	106	98		
PBA Amberley®		101	100	103	99		
PBA Zahra®	No trial	94	102	101	105		
PBA Marne®		94	106	97	88		
Fiesta VF		101	98	93	92		
Farah®		100	97	90	94		
PBA Rana®			86	89	82		
PBA Bendoc ^{(b*}		95	90	75	108		
Nura®		100	86	70	99		
Sowing date		15 May	14 May	16 May	16 May		
Rainfall J–M (mm)		123	111	203	91		
Rainfall A–O (mm)		408	366	533	388		

Special thanks to 2023 trial cooperator.

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

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



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Faba bean variety disease ratings - Victoria

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

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

Table 2: Faba bean disease guide for Victoria.							
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®	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®		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.



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