



**GRDC**  
GRAINS RESEARCH  
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CORPORATION

# NVT HARVEST REPORT



**APRIL 2020**  
**WIMMERA AND UPPER SE SOUTH AUSTRALIA**



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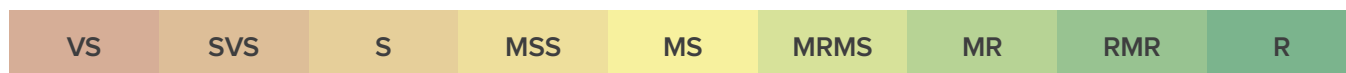
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## LEGEND: MEAN VARIETY YIELD PERFORMANCE



Variation from the annual site mean yield

## DISEASE RATING COLOUR RANGE



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

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to the *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

# INTRODUCTION

This *NVT Harvest Report* provides information to support growers and advisers with decisions on variety selection for Wimmera and Upper SE South Australia. 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 2019 and long-term yield performance of varieties of crop species suitable for production in Wimmera and Upper SE South Australia together with their quality and disease responses.

The NVT program provides growers and advisers with comparative data 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 acknowledges that an ongoing project of this type would not be possible without the cooperation of growers prepared to contribute sites and who often assist with the management of trials on their property.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

## INTERPRETING LONG-TERM YIELD DATA

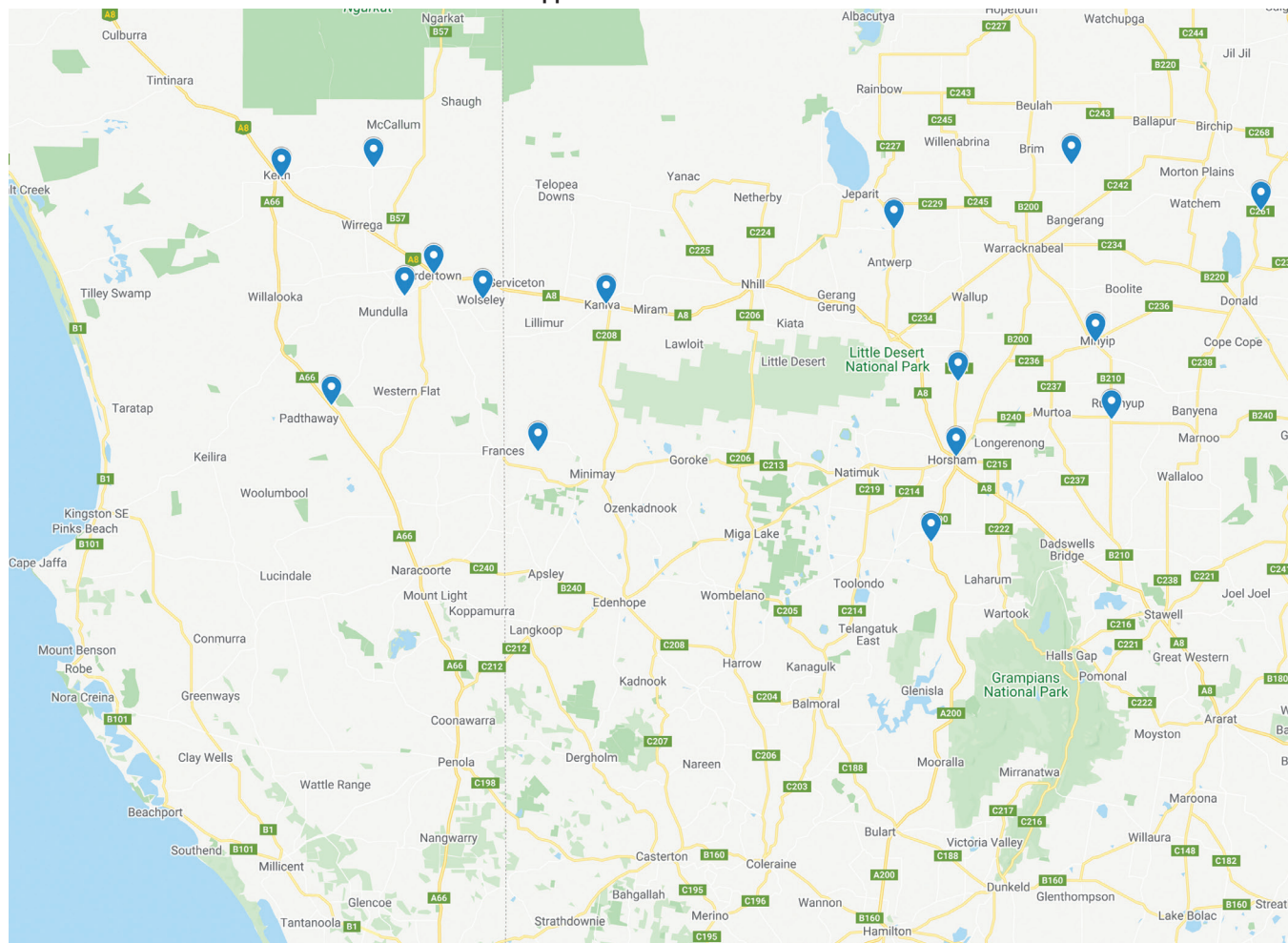
A factor analytic (FA) mixed model approach is used in the multi-environment trial (MET) analysis conducted by GRDC, supported by the Statistics for the Australian Grains Industry (SAGI) program. This approach generates long-term MET values for varieties at an individual trial level.

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

In this Wimmera and Upper SE South Australia Harvest Report, results are presented for yield and quality in year groupings for 2019 and the previous four years. Further detailed interrogation of the NVT Online dataset using the NVT Long Term Yield Reporting Tool will provide more specific performance data on all varieties of each crop species in each NVT location throughout Wimmera and Upper SE South Australia.

## NVT SITE LOCATIONS – WIMMERA AND UPPER SE SA 2015–2019

FIGURE 1 Location of NVT trial sites in Wimmera and Upper SE South Australia from 2015–2019.



SOURCE: NVT ONLINE

# WHEAT

## NEW WHEAT VARIETIES

The following information is for wheat varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Bitalli <sup>Ⓢ</sup>	Australian Grain Technologies	3.50	A 'low-risk' durum variety, combining adaptation to a range of environments and growing conditions, excellent grain quality with low screenings risk and high test weights, while setting a new yield benchmark across all southern Australian durum-growing environments. Early-mid maturity provides good adaptation in tough finishes to the growing season and has an ADR quality classification in the southern region.
Catapult <sup>Ⓢ</sup>	Australian Grain Technologies	3.25	Longer season than Scepter <sup>Ⓢ</sup> , with a mid-late maturity allowing growers to achieve Scepter <sup>Ⓢ</sup> -like yields when sown in late April. Catapult <sup>Ⓢ</sup> has a very flexible sowing window with wide adaptation and is viewed as a great alternative to Trojan <sup>Ⓢ</sup> , Magenta <sup>Ⓢ</sup> , Cutlass <sup>Ⓢ</sup> and Yitpi <sup>Ⓢ</sup> . Catapult <sup>Ⓢ</sup> offers a unique combination of features to growers with Australian Hard quality (WA/SA/VIC/southern NSW).
DBA Artemis <sup>Ⓢ</sup>	University of Adelaide	3.00	Mid-maturity durum wheat but can be up to a week behind development when compared with DBA-Aurora <sup>Ⓢ</sup> . Preferred growing regions are SA and VIC and classified ADR for the southern region. Similar stature and growth habit to DBA-Aurora <sup>Ⓢ</sup> . DBA Artemis <sup>Ⓢ</sup> , when compared with DBA-Aurora <sup>Ⓢ</sup> , has comparable screenings but reduced grain size.
EG Jet <sup>Ⓢ</sup>	Elders/Seedmark	n/a	Not supplied
LRPB Hellfire <sup>Ⓢ</sup>	LongReach Plant Breeders Pty Ltd	4.25	Not supplied
LRPB Nighthawk <sup>Ⓢ</sup>	LongReach Plant Breeders Pty Ltd	4.25	Not supplied
LRPB Parakeet <sup>Ⓢ</sup>	LongReach Plant Breeders Pty Ltd	3.75	Aimed at the 'Rosella' noodle markets in NSW and Victoria.
RockStar <sup>Ⓢ</sup>	InterGrain	3.50	High-yielding, mid-late flowering variety with a similar time to flowering as LRPB Trojan <sup>Ⓢ</sup> and Magenta <sup>Ⓢ</sup> . It has an AH classification in WA, SA and VIC and has a potential AH classification in southern NSW. The variety provides a large yield improvement within the mid-late flowering variety class. RockStar <sup>Ⓢ</sup> offers an opportunity to maximise sowing opportunities and spread flowering windows during critical spring stress periods. It has good Stem rust (MR), Yellow leaf spot (MRMS) and Stripe rust (RMR) resistance. It has a good grain size, good test weight and has a moderate plant height similar to Mace <sup>Ⓢ</sup> . RockStar <sup>Ⓢ</sup> is an excellent varietal alternative to LRPB Trojan <sup>Ⓢ</sup> , Magenta <sup>Ⓢ</sup> , Yitpi <sup>Ⓢ</sup> and Cutlass <sup>Ⓢ</sup> .
Westcourt <sup>Ⓢ</sup>	Australian Grain Technologies	3.50	Offers durum growers of northern NSW and Queensland a dominant package of yield, disease resistance and grain quality, and may be viewed as an alternative to all other durum varieties grown in the northern region, including DBA Lillaroi <sup>Ⓢ</sup> . Mid-season maturing variety similar to Caparoi <sup>Ⓢ</sup> and has an ADR quality classification in northern and southern regions.

n/a not available, \* EPR amount is ex-GST, <sup>Ⓢ</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

## WHEAT VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Brim main season wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		4.32	3.77	1.92	2.76
RockStar <sup>®</sup>	Trial failed				112
Vixen <sup>®</sup>		110	111	118	110
Scepter <sup>®</sup>		104	114	108	112
Catapult <sup>®</sup>				107	109
Beckom <sup>®</sup>		108	107	106	105
LRPB Scout <sup>®</sup>		111	98	108	100
LRPB Trojan <sup>®</sup>		106	105	98	102
Shield <sup>®</sup>		105	99	107	102
LRPB Arrow <sup>®</sup>		100	104	101	102
Cutlass <sup>®</sup>		103	103	96	101
CLEARFIELD® PLUS					
Razor CL Plus <sup>®</sup>			104	108	104
Sheriff CL Plus <sup>®</sup>		102		103	105
Elmore CL Plus <sup>®</sup>		103	93	99	95
Sowing date	15 May	21 May	10 May	11 May	21 May
Rainfall J–M (mm)	26	65	72	9	17
Rainfall A–O (mm)	146	405	226	136	186

For more information click this [LINK](#)

**TABLE 3 Horsham main season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.09</b>	<b>6.98</b>	<b>5.05</b>	<b>1.76</b>	<b>4.71</b>
Vixen <sup>®</sup>		112	111	103	109
Scepter <sup>®</sup>	142	107	113	100	113
RockStar <sup>®</sup>					112
Catapult <sup>®</sup>				105	110
Beckom <sup>®</sup>	111	107	104	106	105
Mace <sup>®</sup>	122	102	108	92	105
Tenfour <sup>®</sup>	85	114	108	87	97
LRPB Arrow <sup>®</sup>	106	105	105	96	103
Corack <sup>®</sup>	113	104	110	83	102
LRPB Trojan <sup>®</sup>	88	107	102	104	103
<b>CLEARFIELD® PLUS</b>					
Razor CL Plus <sup>®</sup>			106	98	103
Sheriff CL Plus <sup>®</sup>		105		100	105
Chief CL Plus <sup>®</sup>		97	106	89	105
<b>Sowing date</b>	<b>21 May</b>	<b>24 May</b>	<b>25 May</b>	<b>16 May</b>	<b>29 May</b>
<b>Rainfall J–M (mm)</b>	<b>2</b>	<b>69</b>	<b>60</b>	<b>24</b>	<b>35</b>
<b>Rainfall A–O (mm)</b>	<b>142</b>	<b>374</b>	<b>299</b>	<b>186</b>	<b>250</b>

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Corack main season wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		7.05	5.10		
Vixen <sup>®</sup>	Trial failed	114	113	Trial failed	No trial
Scepter <sup>®</sup>		107	113		
Tenfour <sup>®</sup>		111	107		
Beckom <sup>®</sup>		109	105		
LRPB Trojan <sup>®</sup>		109	103		
LRPB Arrow <sup>®</sup>		104	105		
LRPB Cobra <sup>®</sup>		109	98		
LRPB Havoc <sup>®</sup>		100	107		
Mace <sup>®</sup>		100	107		
Cosmick <sup>®</sup>		105	100		
CLEARFIELD® PLUS					
Razor CL Plus <sup>®</sup>			106		
Chief CL Plus <sup>®</sup>		93	104		
Grenade CL Plus <sup>®</sup>		94	95		
Sowing date	27 Apr	8 May	9 May	9 May	
Rainfall J–M (mm)	59	79	82	22	
Rainfall A–O (mm)	152	418	243	180	

For more information click this [LINK](#)

**TABLE 4 Kaniva main season wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.52	8.35	6.03		5.28
Vixen <sup>®</sup>		115	110	Trial failed	113
Scepter <sup>®</sup>	128	107	112		112
RockStar <sup>®</sup>					110
Tenfour <sup>®</sup>	101	113	109		106
Catapult <sup>®</sup>					108
Beckom <sup>®</sup>	110	108	105		105
LRPB Arrow <sup>®</sup>	108	105	106		105
LRPB Trojan <sup>®</sup>	102	107	106		103
Corack <sup>®</sup>	111	101	108		106
Mace <sup>®</sup>	114	101	106		106
CLEARFIELD® PLUS					
Razor CL Plus <sup>®</sup>			105		106
Sheriff CL Plus <sup>®</sup>		105			106
Chief CL Plus <sup>®</sup>		94	105		102
Sowing date	11 May	19 May	12 May	9 May	23 May
Rainfall J–M (mm)	67	103	47	18	16
Rainfall A–O (mm)	181	428	342	295	271

For more information click this [LINK](#)



TABLE 5 Keith main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		5.28	4.17	3.44	
Vixen <sup>db</sup>	Trial failed	107		115	Trial failed
Scepter <sup>db</sup>		107	110	114	
RockStar <sup>db</sup>				113	
Catapult <sup>db</sup>				110	
LRPB Trojan <sup>db</sup>		112	101	106	
Beckom <sup>db</sup>		108	104	108	
LRPB Cobra <sup>db</sup>		108	107	101	
LRPB Havoc <sup>db</sup>		99	115	105	
LRPB Arrow <sup>db</sup>		104	107	106	
Corack <sup>db</sup>		99	113	106	
CLEARFIELD® PLUS					
Razor CL Plus <sup>db</sup>			110	107	
Sheriff CL Plus <sup>db</sup>		105		107	
Chief CL Plus <sup>db</sup>		98	102	102	
Sowing date	21 May	24 May	23 May	16 May	16 May
Rainfall J–M (mm)	73	116	54	17	16
Rainfall A–O (mm)	188	431	362	290	244

For more information click this [LINK](#)

TABLE 7 Wolsley main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		7.07		4.57	5.91
Vixen <sup>db</sup>	Trial failed	113	Trial failed	116	117
RockStar <sup>db</sup>				111	110
LRPB Cobra <sup>db</sup>		113		107	105
Scepter <sup>db</sup>		105		109	111
Beckom <sup>db</sup>		108		108	107
Catapult <sup>db</sup>				107	108
LRPB Trojan <sup>db</sup>		108		106	104
LRPB Havoc <sup>db</sup>		105		104	107
LRPB Arrow <sup>db</sup>		105		105	106
LRPB Scout <sup>db</sup>		105		105	104
CLEARFIELD® PLUS					
Razor CL Plus <sup>db</sup>				108	109
Sheriff CL Plus <sup>db</sup>		104		105	106
Chief CL Plus <sup>db</sup>		94		96	99
Sowing date	22 May	24 May	10 May	24 May	14 May
Rainfall J–M (mm)	51	109	48	24	16
Rainfall A–O (mm)	221	490	369	322	263

For more information click this [LINK](#)

TABLE 6 Minyip main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.26	6.76	4.12		4.38
Scepter <sup>db</sup>	141	104	113	Trial failed	117
Vixen <sup>db</sup>		105	112		112
RockStar <sup>db</sup>					114
Catapult <sup>db</sup>					112
Beckom <sup>db</sup>	111	105	106		106
Mace <sup>db</sup>	124	99	106		108
LRPB Arrow <sup>db</sup>	108	103	104		105
Corack <sup>db</sup>	119	99	104		106
LRPB Trojan <sup>db</sup>	85	107	103		104
Tenfour <sup>db</sup>	95	107	101		101
CLEARFIELD® PLUS					
Sheriff CL Plus <sup>db</sup>		103			107
Razor CL Plus <sup>db</sup>			105		105
Chief CL Plus <sup>db</sup>		98	103		107
Sowing date	20 May	20 May	15 May	29 May	22 May
Rainfall J–M (mm)	7	83	72	17	11
Rainfall A–O (mm)	169	429	284	198	255

For more information click this [LINK](#)

TABLE 8 Minyip early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)					5.04
RockStar <sup>db</sup>	No trial	No trial	No trial	No trial	115
LRPB Beaufort <sup>db</sup>					109
Catapult <sup>db</sup>					107
Illabo <sup>db</sup>					107
DS Pascal <sup>db</sup>					104
DS Bennett <sup>db</sup>					104
LRPB Nighthawk <sup>db</sup>					101
Longsword <sup>db</sup>					100
EGA Wedgetail <sup>db</sup>					99
Coolah <sup>db</sup>					94
CLEARFIELD® PLUS					
Sheriff CL Plus <sup>db</sup>					104
Elmore CL Plus <sup>db</sup>					91
Sowing date					16 Apr
Rainfall J–M (mm)					11
Rainfall A–O (mm)					255

For more information click this [LINK](#)

**TABLE 9 Kaniva durum wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		6.90	5.73	4.16	4.33
WID802 <sup>db</sup>	Trial failed	115	103	103	103
Bitalli <sup>db</sup>			106	104	106
DBA-Aurora <sup>db</sup>		111	102	102	102
DBA Artemis <sup>db</sup>		108	100	101	99
Westcourt <sup>db</sup>				107	98
DBA Spes <sup>db</sup>		105	100	101	100
DBA Vittaro <sup>db</sup>				98	104
DBA Bindaro <sup>db</sup>				98	99
Hyperno <sup>db</sup>		97	98	99	98
Saintly <sup>db</sup>		90	101	99	104
Sowing date	11 May	19 May	12 May	9 May	23 May
Rainfall J–M (mm)	67	103	47	18	16
Rainfall A–O (mm)	181	428	342	295	271

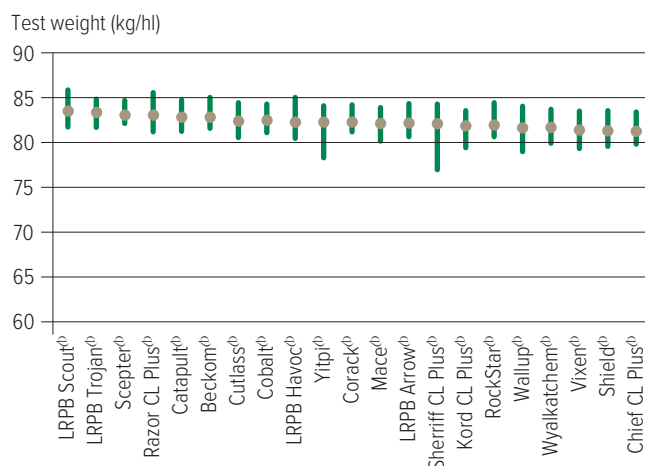
For more information click this [LINK](#)

## WHEAT VARIETY QUALITY – SOUTH AUSTRALIA AND VICTORIA

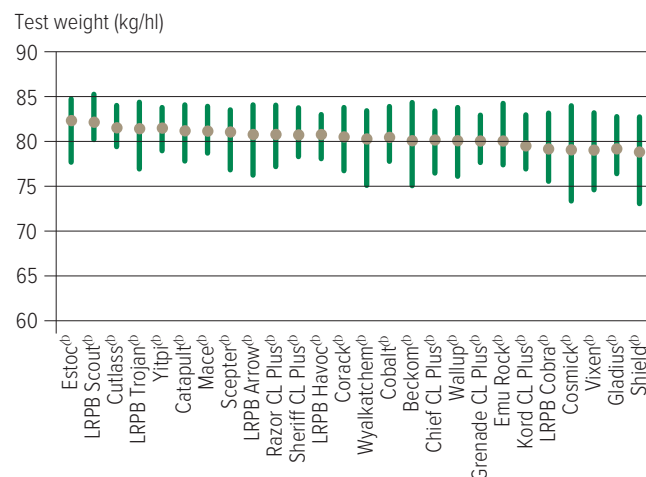
Grain quality for individual varieties varies from site to site and from year to year, however long term and across site trends highlight varieties that can consistently achieve either higher test weights, or lower grain screenings under a wider range of environments. As the Wimmera and Upper SE South Australia spans both South Australia and Victoria wheat quality data from each state is presented. The following figures show the grain quality trends as

either histograms or box and whisker plots from 2018 and 2019 NVT trials averaged for all trials in each state. Only the varieties evaluated at every site are included. Histograms are used where there were less than 10 sites data for either 2018 or 2019 to enable comparison across years. For the box and whisker plots each figure shows the median value (circle) and variability (lines) of each wheat variety. The range of the lines represent the middle 50 per cent of grain screenings and test weights for each variety. The shorter the lines, the less variable the variety for the depicted trait.

**FIGURE 1 Test weight (kg/hl) comparisons for main season wheat varieties from 22 NVT sites in SA 2019.**

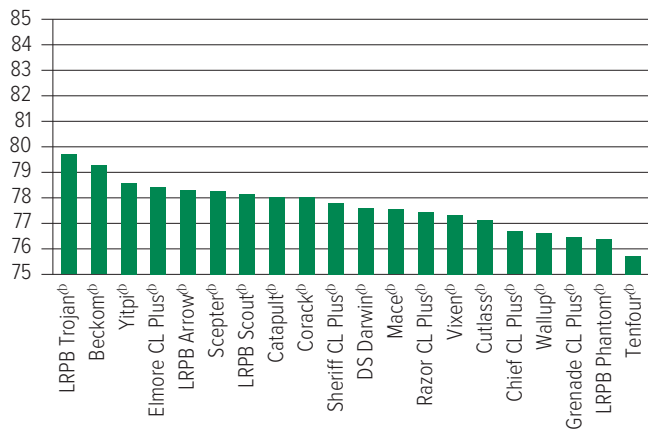


**FIGURE 2 Test weight (kg/hl) comparisons for main season wheat varieties from 19 NVT sites in SA 2018.**



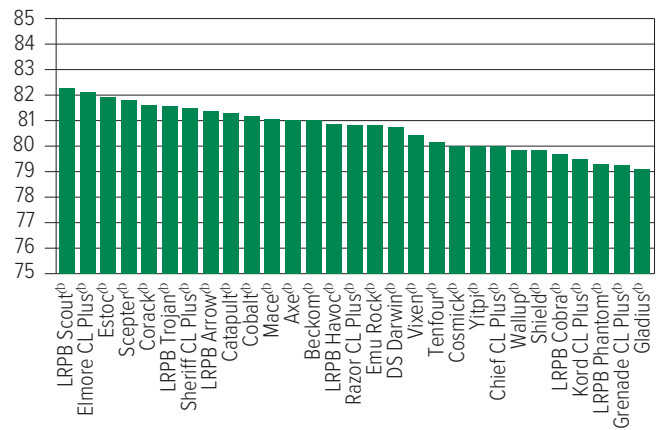
**FIGURE 3 Test weight (kg/hl) comparisons for main season wheat varieties from 15 NVT sites in Victoria 2019.**

Test weight (kg/hl)



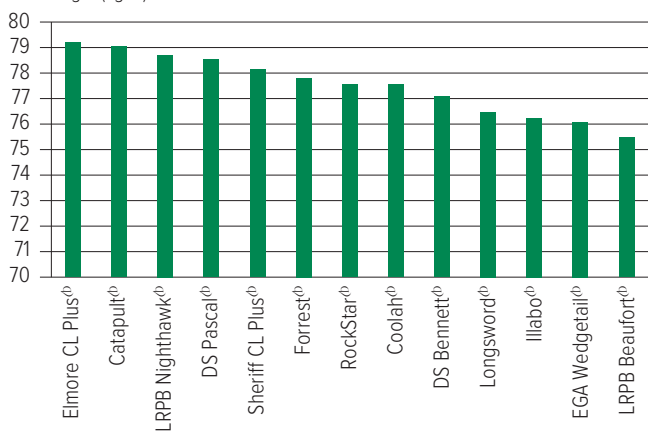
**FIGURE 4 Test weight (kg/hl) comparisons for main season wheat varieties from six NVT sites in Victoria 2018.**

Test weight (kg/hl)



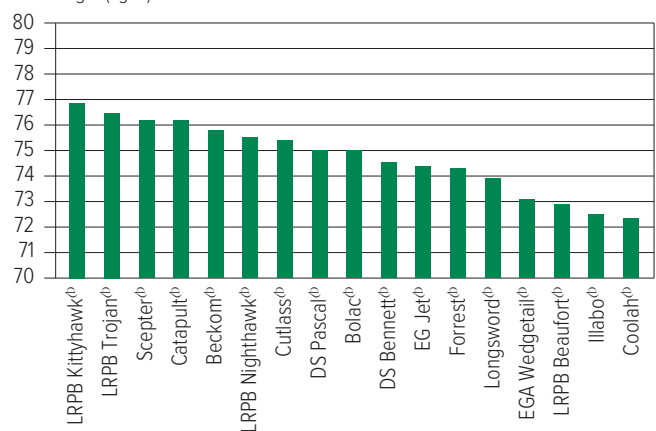
**FIGURE 5 Test weight (kg/hl) comparisons for early season wheat varieties from five NVT sites in Victoria 2019.**

Test weight (kg/hl)

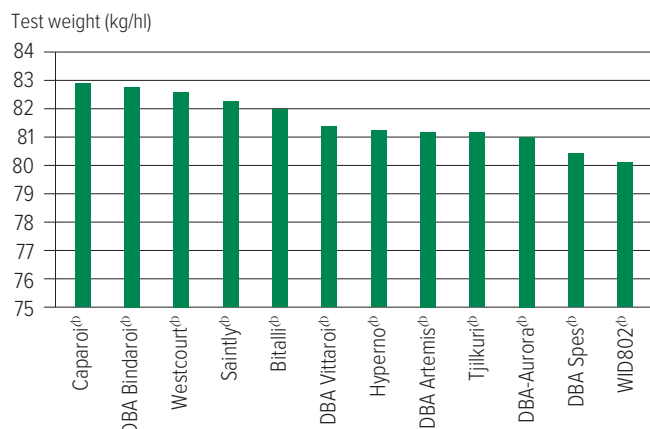


**FIGURE 6 Test weight (kg/hl) comparisons for early season wheat varieties from five NVT sites in Victoria 2018.**

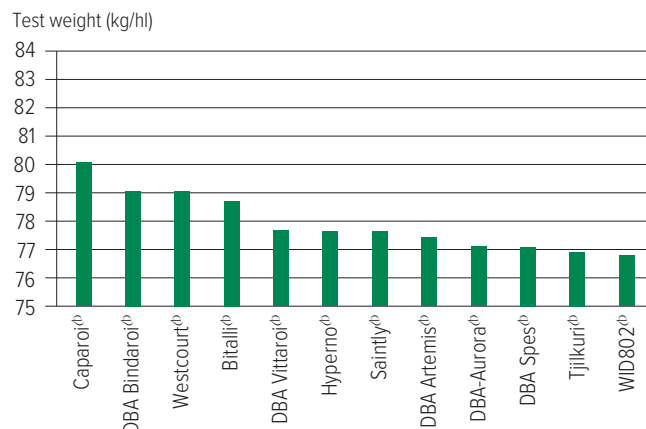
Test weight (kg/hl)



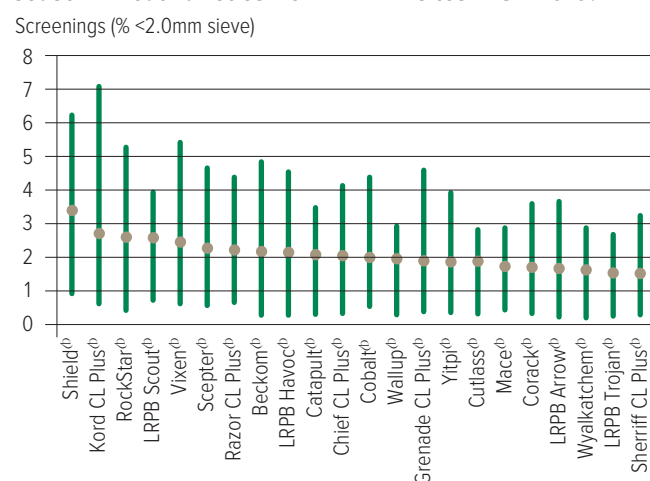
**FIGURE 7 Test weight (kg/hl) comparisons for durum wheat varieties from six NVT sites in SA 2019.**



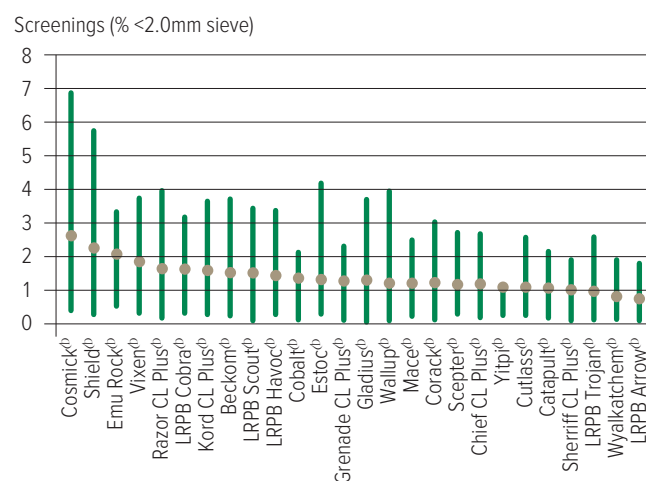
**FIGURE 8 Test weight (kg/hl) comparisons for durum wheat varieties from four NVT sites in SA 2018.**



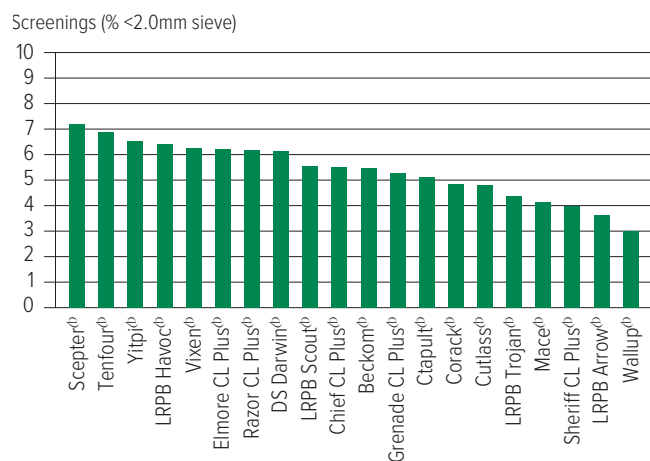
**FIGURE 9 Screenings (<2.0mm) comparisons for main season wheat varieties from 22 NVT sites in SA 2019.**



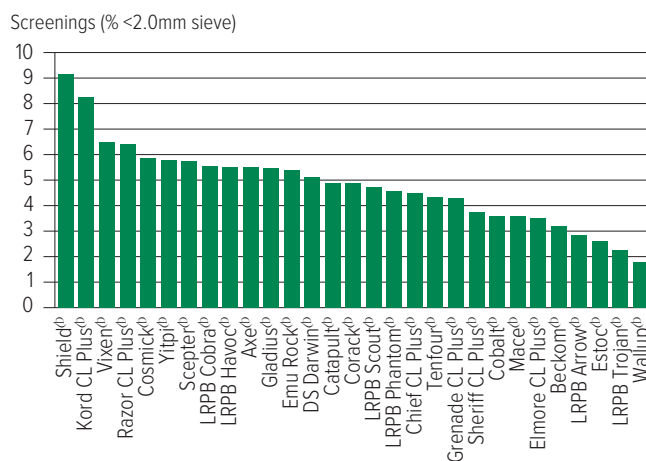
**FIGURE 10 Screenings (<2.0mm) comparisons for main season wheat varieties from 19 NVT sites in SA 2018.**



**FIGURE 11 Screenings (<2.0mm) comparisons for main season wheat varieties from 15 NVT sites in Victoria 2019.**



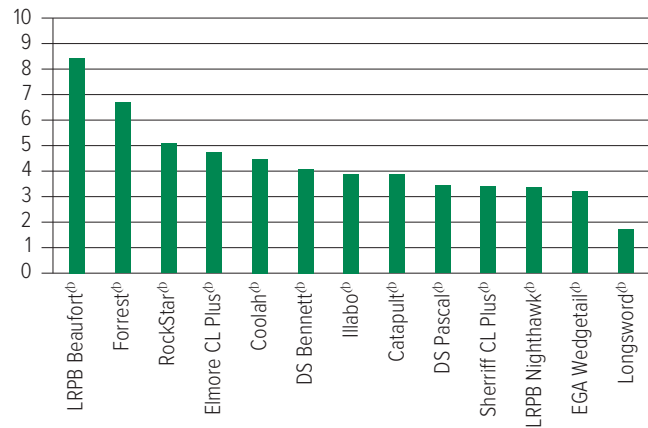
**FIGURE 12 Screenings (<2.0mm) comparisons for main season wheat varieties from six NVT sites in Victoria 2018.**





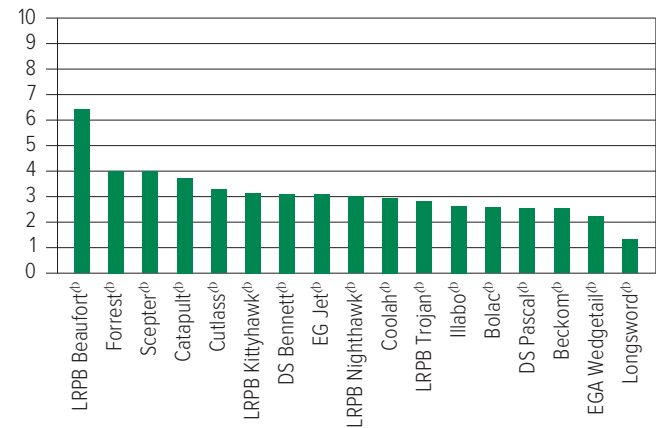
**FIGURE 13 Screenings (<2.0mm) comparisons for early season wheat varieties from five NVT sites in Victoria 2019.**

Screenings (% <2.0mm sieve)



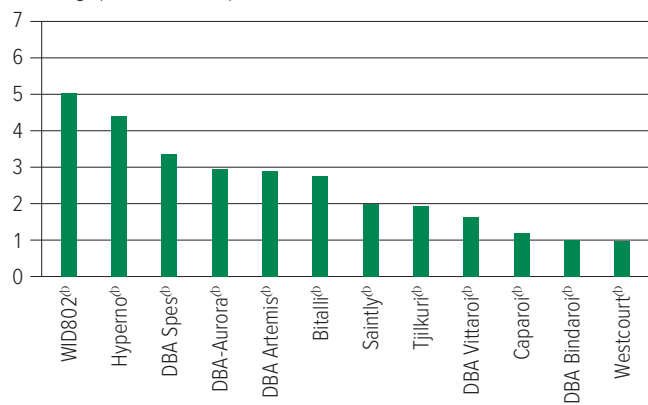
**FIGURE 14 Screenings (<2.0mm) comparisons for early season wheat varieties from five NVT sites in Victoria 2018.**

Screenings (% <2.0mm sieve)



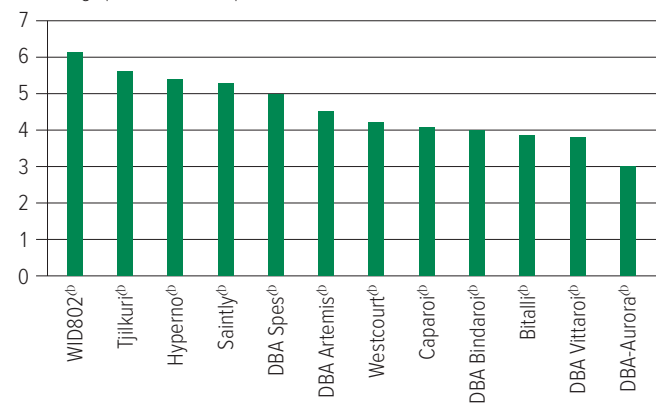
**FIGURE 15 Screenings (<2.0mm) comparisons for durum wheat varieties from six NVT sites in SA 2019.**

Screenings (% <2.0mm sieve)



**FIGURE 16 Screenings (<2.0mm) comparisons for durum wheat varieties from four NVT sites in SA 2018.**

Screenings (% <2.0mm sieve)



## WHEAT VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following two tables contain varietal ratings for the predominant diseases of wheat in Wimmera and Upper SE South Australia. As regionally specific differences in varietal reactions to some diseases can

occur, varietal responses for both South Australia and Victoria are provided.

These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to Wimmera and Upper SE South Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 10 Wheat disease guide for South Australia.**

Variety	Stem rust	Stripe rust	Leaf rust	Septoria tritici blotch	Yellow leaf spot	Powdery mildew	CCN
Beckom <sup>db</sup>	MRMS	MRMS	MSS	S	MSS		R
Catapult <sup>db</sup>	MR	MRMS	S	MSS	MRMS	S	R
Chief CL Plus <sup>db</sup>	MR	S	MR	MSS	MRMS	SVS	MS
Cobalt <sup>db</sup>	S	RMR	MS	S	MS		MSS
Cutlass <sup>db</sup>	R	MS	R	MSS	MSS		MR
DS Bennett <sup>db</sup>	MRMS	S	SVS	MSS	MRMS	R	S
Emu Rock <sup>db</sup>	MS	MSS	SVS	SVS	MRMS		S
Grenade CL Plus <sup>db</sup>	MR	MRMS	S	S	S		R
Illabo <sup>db</sup>	MRMS	MR <sub>p</sub>	S	MSS	MS	R	MRMS
Longsword <sup>db</sup>	MR	MR	MSS	MSS	MRMS	MSS	MRMS
LRPB Arrow <sup>db</sup>	S	S	SVS	S	MRMS	S	MS
LRPB Cobra <sup>db</sup>	MR <sup>^</sup>	MSS	MR/S	MSS	MRMS		MS
LRPB Havoc <sup>db</sup>	S	MR	MSS	S	MRMS		S
LRPB Impala <sup>db</sup>	MR	MR	SVS	SVS	MSS		MSS
LRPB Kittyhawk <sup>db</sup>		RMR		MRMS	MRMS		S
LRPB Nighthawk <sup>db</sup>	RMR	RMR	MSS	MSS	MS	S	MS
LRPB Trojan <sup>db</sup>	MRMS	MSS	MR/MS	MS	MSS	S	MS
Manning <sup>db</sup>	MR	RMR	MSS	MRMS	MR		S
Razor CL Plus <sup>db</sup>	MRMS	MS	S	SVS	MSS	MSS	MR
RGT Accroc	MS	R	SVS	MRMS	MR		S
RGT Calabro	MS	RMR	MSS	MRMS	MR		S
Scepter <sup>db</sup>	MRMS	MSS	MSS	S	MRMS	SVS	MRMS
Sheriff CL Plus <sup>db</sup>	MS	MSS	SVS	S	MRMS	SVS	MS
Tenfour <sup>db</sup>	SVS	SVS	MSS	S	MRMS		MS
Vixen <sup>db</sup>	MRMS	MRMS	SVS	S	MRMS	S	MSS
<b>DURUM</b>							
Bitalli <sup>db</sup>	MR	MS	MR	MRMS	MRMS	S	S
DBA Artemis <sup>db</sup>	MR <sup>^</sup>	MS	RMR	MRMS	MRMS	MSS	MS
DBA-Aurora <sup>db</sup>	RMR	MRMS	R	MR	MRMS	S	MSS
DBA Spes <sup>db</sup>	R	MS	R	MRMS/SVS	MRMS	MSS	MS
DBA Vittaro <sup>db</sup>	MR	MS	MR	MS	MRMS		S
Westcourt <sup>db</sup>	RMR	MR	RMR	MS	MRMS	MSS	MSS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sub>p</sub> = provisional rating, / indicates pathotype differences,

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

TABLE 11 Wheat disease guide for Victoria.

Variety	Stem rust	Stripe rust	Leaf rust	Yellow leaf spot	Septoria tritici blotch	Powdery mildew	CCN	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )	Crown rot	Common root rot	Flag smut
Beckom <sup>db</sup>	MRMS	MRMS	MSS	MSS	S		R	S	MSS	S	MSS	MRMS
Catapult <sup>db</sup>	MR	MRMS	S	MRMS	MSS	S	R	S	MS	Sp	MS	MS/RMR
Chief CL Plus <sup>db</sup>	MR	S	MR	MRMS	MSS	SVS	MS	MRMS	MSS	MSS	MS	SVS
Cobalt <sup>db</sup>	S	RMR	MS	MS	S		MSS	S	S	S	MSS	RMR
Condo <sup>db</sup>	MR	MSS	MSS	MS	S		MR	S	MS	S	MSS	MSS
Coolah <sup>db</sup>	MR	RMR	RMR/MS	MSS	MSS		S	S	MS	MSS	S	R
Corack <sup>db</sup>	MR	MS	SVS	MRMS	S	VS	RMR	MSS	MSS	S	MS	S
Cosmick <sup>db</sup>	MS	MSS	SVS	MRMS	S		S	S	MSS	S	MSS	SVS
Cutlass <sup>db</sup>	R	MS	R	MSS	MSS		MR	MSS	MSS	S	MS	MSS
DS Bennett <sup>db</sup>	MRMS	S	SVS	MRMS	MSS	R	S	S	S	VS	S	SVS
DS Darwin <sup>db</sup>	MRMS	MRMS	MSS	S	S		MSS	S	S	S	MSS	MR
DS Pascal <sup>db</sup>	MSS	RMR	MS	MRMS	MSS		S	S	S	S	MS	S
EGA Gregory <sup>db</sup>	MR	MR	RMR/MS	S	MSS		S	S	MSS	S	MSS	MSS
EGA Wedgetail <sup>db</sup>	MRMS	MS	MSS	MSS	MSS		S	SVS	VS	S		
Elmore CL Plus <sup>db</sup>	MR	MRMS	RMR	S	MSS		S	S	S	S	S	MSS
Emu Rock <sup>db</sup>	MS	MSS	SVS	MRMS	SVS		S	MSS	S	MSS	MS	MS/MR
Grenade CL Plus <sup>db</sup>	MR	MRMS	S	S	S		R	MSS	S	S	MS	MR
Hatchet CL Plus <sup>db</sup>	MS	MSS	SVS	S	SVS		MR	MSS	MSS	S	MS	RMR
Illabo <sup>db</sup>	MRMS	MR <sup>p</sup>	S	MS	MSS	R	MRMS	S	S	Sp	MSS	R
Kiora	MR	RMR	MRMS	MSS	MSS		MS	S	MRMS	S	MS	MRMS
Longsword <sup>db</sup>	MR	MR	MSS	MRMS	MSS	MSS	MRMS	MRMS	MR	MSS	MS	MRMS
LRPB Arrow <sup>db</sup>	S	S	SVS	MRMS	S	S	MS	MRMS	MS	MSS	MS	MS
LRPB Cobra <sup>db</sup>	MR <sup>^</sup>	MSS	MR/S	MRMS	MSS		MS	MSS	MSS	S	MS	S
LRPB Hellfire <sup>db</sup>	MR	MR	MSS	MS	S	MSS	MRMS	S	MSS	MSS <sup>p</sup>	MSS	MS/RMR
LRPB Impala <sup>db</sup>	MR	MR	SVS	MSS	SVS		MSS	SVS	S	MSS	MSS	S
LRPB Kittyhawk <sup>db</sup>		RMR		MRMS	MRMS		S	S	S	SVS	S	RMR
LRPB Lancer <sup>db</sup>	R	MR	RMR/MS	MRMS	MS		S	S	MS	MSS	S	MSS
LRPB Nighthawk <sup>db</sup>	RMR	RMR	MSS	MS	MSS	S	MS	S	MS	MSS <sup>p</sup>	MSS	MSS
LRPB Parakeet <sup>db</sup>	MR	RMR	R	MSS	S	S	MS	MRMS	S	MSS	MS	MSS
Mace <sup>db</sup>	MRMS	SVS	MSS	MRMS	S	MSS	MRMS	MS	MS	S	MS	S
Manning <sup>db</sup>	MR	RMR	MSS	MR	MRMS		S	MSS	S	VS	SVS	R
Mitch <sup>db</sup>	MRMS	MR	MSS	MSS	S		S	S	S	MS	MS	S
Razor CL Plus <sup>db</sup>	MRMS	MS	S	MSS	SVS	MSS	MR	S	MRMS	S	MSS	RMR
RGT Accroc	MS	R	SVS	MR	MRMS		S	S	MSS	SVS		SVS
RGT Calabro	MS	RMR	MSS	MR	MRMS		S	S	MS <sup>p</sup>	SVS	MSS	RMR

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sup>p</sup> = provisional rating, / indicates pathotype differences,

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

TABLE 11 Wheat disease guide for Victoria (continued).

Variety	Stem rust	Stripe rust	Leaf rust	Yellow leaf spot	Septoria tritici blotch	Powdery mildew	CCN	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )	Crown rot	Common root rot	Flag smut
RGT Zanzibar	VS	R	SVS	MS	S		MSS	S	MS <sub>p</sub>	S	S	SVS
RockStar <sup>db</sup>	MR	MRMS	S	MRMS	MSS	S	MSS	MRMS	MRMS	Sp	MS	VS
Scepter <sup>db</sup>	MRMS	MSS	MSS	MRMS	S	SVS	MRMS	S	MSS	MSS	MS	MSS
SF Adagio	SVS	RMR	S	MR	MRMS		S	MS	MSS	SVS	MSS	MS
SF Scenario	MSS	R	MSS	MS	MRMS		S	S	S	SVS	MS	RMR
Sheriff CL Plus <sup>db</sup>	MS	MSS	SVS	MRMS	S	SVS	MS	MRMS	MRMS	S	MS	S
SQP Revenue <sup>db</sup>	RMR <sup>^</sup>	R	VS	MRMS	MSS		S	S	S	S	SVS	S
Sunlamb <sup>db</sup>	RMR	MRMS	MS	MRMS	MR		MR	MSS	MSS	S	MS	S
Suntop <sup>db</sup>	MRMS	MRMS	MR	MSS	MSS		S	S	MRMS	MSS	MS	R
Tenfour <sup>db</sup>	SVS	SVS	MSS	MRMS	S		MS	S	S	MSS	MS	MR
Vixen <sup>db</sup>	MRMS	MRMS	SVS	MRMS	S	S	MSS	MRMS	MS	S	MS	SVS
Yitpi <sup>db</sup>	S	MS	S	SVS	MSS		MR	MSS	S	S	MS	MR
DURUM												
Bitalli <sup>db</sup>	MR	MS	MR	MRMS	MRMS	S	S	MSS	RMR	SVSp	MS	R
DBA-Aurora <sup>db</sup>	RMR	MRMS	R	MRMS	MR	S	MSS	MRMS	RMR	VS	MSS	
DBA Spes <sup>db</sup>	R	MS	R	MRMS	MRMS/SVS	MSS	MS	MRMS	RMR	VS	MS	R
DBA Vittaro <sup>db</sup>	MR	MS	MR	MRMS	MS		S	MS	MR	SVS	MSS	R
Westcourt <sup>db</sup>	RMR	MR	RMR	MRMS	MS	MSS	MSS	MS	MR	SVSp	MS	R

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, *p* = provisional rating, / indicates pathotype differences, <sup>^</sup> line contains a few susceptible off types.



# BARLEY

## NEW BARLEY VARIETIES

The following information is for barley varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Leabrook <sup>♢</sup>	University of Adelaide	3.80	Mid-early maturing, medium-tall variety under malting evaluation. Bred for yield and grain size improvement over Compass <sup>♢</sup> .
Maximus CL <sup>♢</sup>	InterGrain	n/a	Exceptionally high yielding, early to mid-flowering, potential malt, imidazoline-tolerant barley. Seed available 2021.

n/a not available, \* EPR amount is ex-GST, <sup>♢</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FABA BEAN

FIELD PEA

LENTIL

LUPIN

## BARLEY VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Bordertown main season barley.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.33</b>	<b>6.12</b>	<b>6.19</b>	<b>6.10</b>	<b>6.21</b>
RGT Planet <sup>db</sup>		119	115	109	114
Rosalind <sup>db</sup>	148	108	112	106	108
Bottler <sup>db</sup>		108	105	103	105
Banks <sup>db</sup>	122	105	104	103	100
Leabrook <sup>db</sup>	139	101	103	104	98
Fathom <sup>db</sup>	130	102	100	103	102
Capstan	81	114	101	101	100
Explorer <sup>db</sup>	86	98	103	103	110
Bass <sup>db</sup>	97	108	102	99	96
LG Alestar <sup>db</sup>				99	102
<b>CLEARFIELD®</b>					
Maximus CL <sup>db</sup>				98	100
Spartacus CL <sup>db</sup>	144	95	101	99	100
Scope CL <sup>db</sup>	108	93	94	95	96
<b>Sowing date</b>	<b>25 May</b>	<b>23 May</b>	<b>17 May</b>	<b>6 Jun</b>	<b>24 May</b>
<b>Rainfall J–M (mm)</b>	<b>51</b>	<b>104</b>	<b>75</b>	<b>21</b>	<b>18</b>
<b>Rainfall A–O (mm)</b>	<b>221</b>	<b>490</b>	<b>395</b>	<b>351</b>	<b>346</b>

For more information click this [LINK](#)

**TABLE 3 Horsham main season barley.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.46</b>	<b>7.43</b>	<b>5.15</b>	<b>3.73</b>	<b>6.66</b>
RGT Planet <sup>db</sup>		120	109	109	116
Rosalind <sup>db</sup>	141	103	112	116	106
Fathom <sup>db</sup>	146	107	98	118	99
Leabrook <sup>db</sup>	144	93	107	124	98
Bottler <sup>db</sup>		110	102	100	106
LG Maltstar <sup>db</sup>	73	115	101	98	106
Banks <sup>db</sup>	120	102	102	114	100
Bass <sup>db</sup>		109	100	102	98
Explorer <sup>db</sup>		100	107	88	110
La Trobe <sup>db</sup>	146	93	99	106	97
<b>CLEARFIELD®</b>					
Spartacus CL <sup>db</sup>	152	93	103	107	96
Maximus CL <sup>db</sup>				109	95
Scope CL <sup>db</sup>	109	93	90	98	92
<b>Sowing date</b>	<b>21 May</b>	<b>24 May</b>	<b>25 May</b>	<b>16 May</b>	<b>29 May</b>
<b>Rainfall J–M (mm)</b>	<b>2</b>	<b>69</b>	<b>60</b>	<b>24</b>	<b>35</b>
<b>Rainfall A–O (mm)</b>	<b>142</b>	<b>374</b>	<b>299</b>	<b>186</b>	<b>250</b>

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Brim main season barley.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		6.01	4.27	1.75	3.58
Leabrook <sup>db</sup>	Trial failed	107	109	109	116
Fathom <sup>db</sup>		103	111	109	115
Rosalind <sup>db</sup>		103	106	105	113
Compass <sup>db</sup>		98	106	113	117
RGT Planet <sup>db</sup>		108	111	103	97
Banks <sup>db</sup>		103	106	107	106
Buff <sup>db</sup>				114	107
Commander <sup>db</sup>		104	105	99	103
Hindmarsh <sup>db</sup>		94	102	106	114
La Trobe <sup>db</sup>		93	103	106	113
CLEARFIELD®					
Spartacus CL <sup>db</sup>		95	99	103	115
Maximus CL <sup>db</sup>				106	114
Scope CL <sup>db</sup>		90	97	105	99
Sowing date	15 May	13 May	10 May	11 May	21 May
Rainfall J–M (mm)	26	65	72	9	17
Rainfall A–O (mm)	146	405	226	136	186

For more information click this [LINK](#)

**TABLE 4 Kaniva main season barley.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.81		5.88	6.08	6.24
RGT Planet <sup>db</sup>		Trial failed	116	119	115
Rosalind <sup>db</sup>	132		108	98	109
Buff <sup>db</sup>				103	104
Banks <sup>db</sup>	117		106	103	102
Leabrook <sup>db</sup>	132		105	99	101
Bottler <sup>db</sup>			104	106	105
LG Maltstar <sup>db</sup>	84		103	110	103
Fathom <sup>db</sup>	127		99	99	103
Explorer <sup>db</sup>			100	104	108
Compass <sup>db</sup>	139			101	91
CLEARFIELD®					
Maximus CL <sup>db</sup>				84	100
Spartacus CL <sup>db</sup>	133		95	84	100
Scope CL <sup>db</sup>	105		95	94	95
Sowing date	11 May	19 May	12 May	9 May	23 May
Rainfall J–M (mm)	67	103	47	18	16
Rainfall A–O (mm)	181	428	342	295	271

For more information click this [LINK](#)

TABLE 5 Keith main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.92	6.13	4.41	4.54	4.88
Rosalind <sup>Ⓛ</sup>	125	103	108	109	121
Leabrook <sup>Ⓛ</sup>	132	99	111	112	117
Compass <sup>Ⓛ</sup>	134	92	108	109	118
Banks <sup>Ⓛ</sup>	111	103	106	105	108
RGT Planet <sup>Ⓛ</sup>		115	106	102	102
Fathom <sup>Ⓛ</sup>	111	105	100	104	109
Hindmarsh <sup>Ⓛ</sup>	123	93	100	104	116
La Trobe <sup>Ⓛ</sup>	117	94	98	102	113
Bass <sup>Ⓛ</sup>	99	104	101	100	100
Buff <sup>Ⓛ</sup>				102	107
<b>CLEARFIELD®</b>					
Maximus CL <sup>Ⓛ</sup>				105	120
Spartacus CL <sup>Ⓛ</sup>	127	94	100	105	118
Scope CL <sup>Ⓛ</sup>	95	94	96	95	98
Sowing date	21 May	24 May	23 May	16 May	17 May
Rainfall J–M (mm)	73	116	54	17	16
Rainfall A–O (mm)	185	431	362	290	244

For more information click this [LINK](#)

TABLE 6 Minyip main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.83	7.17	5.21		5.81
RGT Planet <sup>Ⓛ</sup>		122	116	Trial failed	108
Fathom <sup>Ⓛ</sup>	141	100	103		103
LG Maltstar <sup>Ⓛ</sup>	76	115	104		103
Rosalind <sup>Ⓛ</sup>	128	101	104		103
Bottler <sup>Ⓛ</sup>		110	104		102
Explorer <sup>Ⓛ</sup>		105	108		102
Banks <sup>Ⓛ</sup>	112	100	102		103
Leabrook <sup>Ⓛ</sup>	138	89	101		104
Bass <sup>Ⓛ</sup>	99	105	94		98
La Trobe <sup>Ⓛ</sup>	139	91	99		98
CLEARFIELD®					
Spartacus CL <sup>Ⓛ</sup>	146	89	94		97
Maximus CL <sup>Ⓛ</sup>					97
Scope CL <sup>Ⓛ</sup>	104	93	96		96
Sowing date	20 May	20 May	15 May	29 May	22 May
Rainfall J–M (mm)	7	83	72	17	11
Rainfall A–O (mm)	169	429	284	198	255

For more information click this [LINK](#)

## BARLEY VARIETY QUALITY – SOUTH AUSTRALIA AND VICTORIA

Grain quality for individual varieties varies from site to site and from year to year, however long term and across site trends highlight varieties that can consistently achieve either higher test weights, lower grain screenings or higher retention under a wider range of environments. As the Wimmera and

Upper SE South Australia spans both South Australia and Victoria barley quality data from each state is presented. Each figure shows the median value (circle) and variability (lines) of each barley variety. The range of the lines represents the middle 50 per cent of grain screenings, test weights and retention for each variety. The shorter the lines, the less variable the variety for the depicted trait.

FIGURE 1 Test weight (kg/hl) comparisons for main season barley varieties from 15 NVT sites in SA 2019.

Test weight (kg/hl)

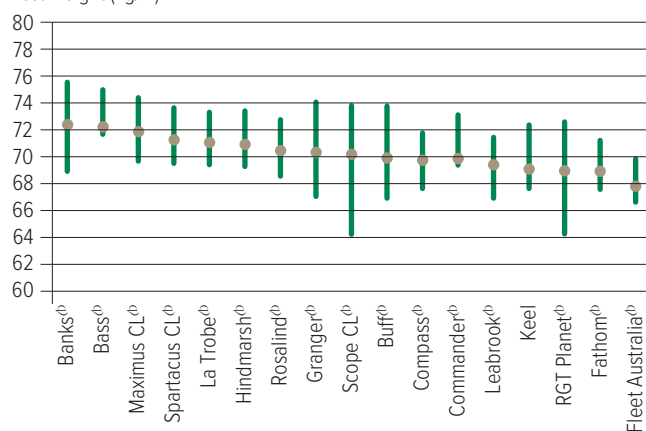
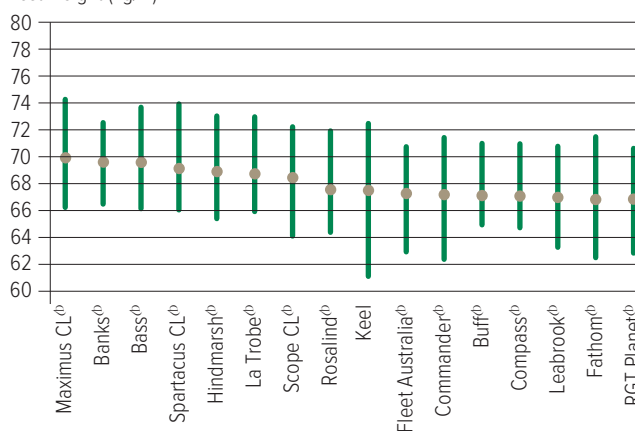
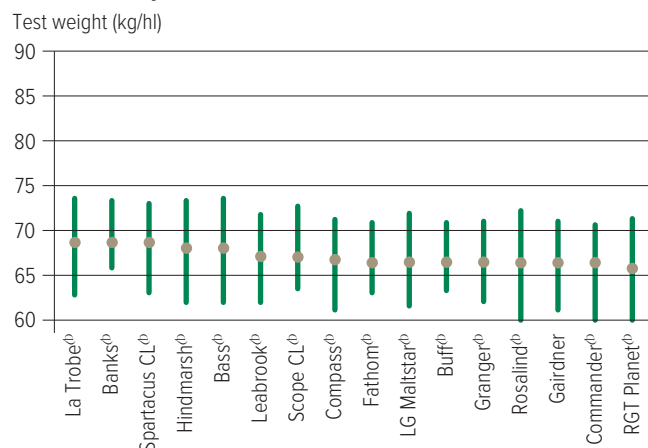
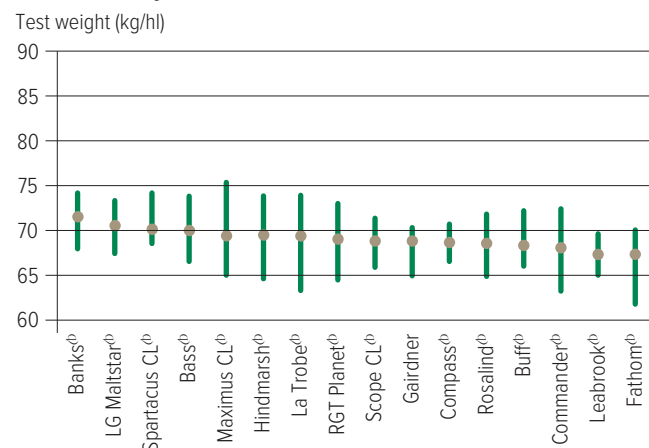
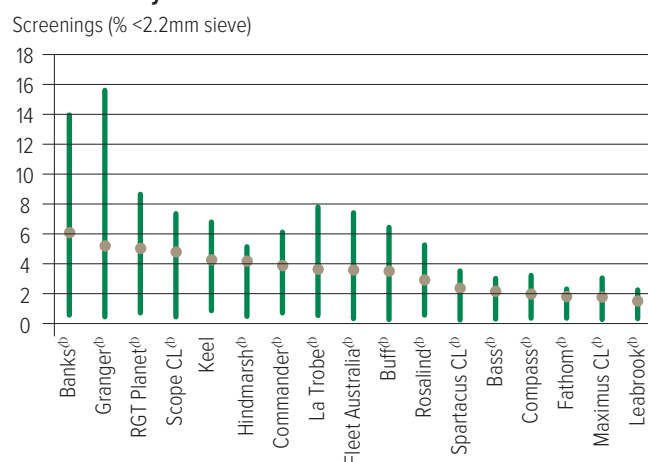
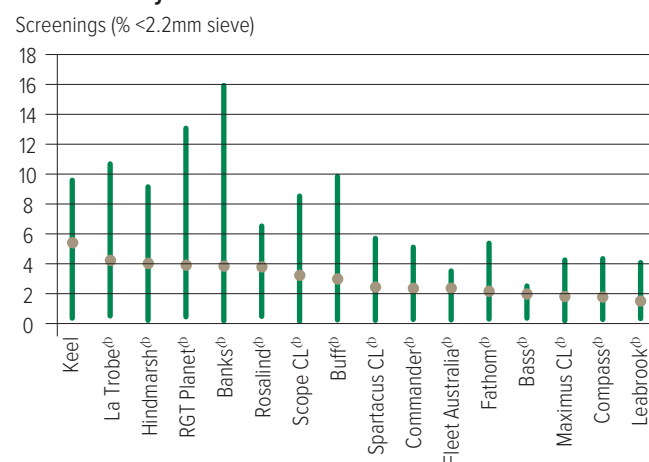
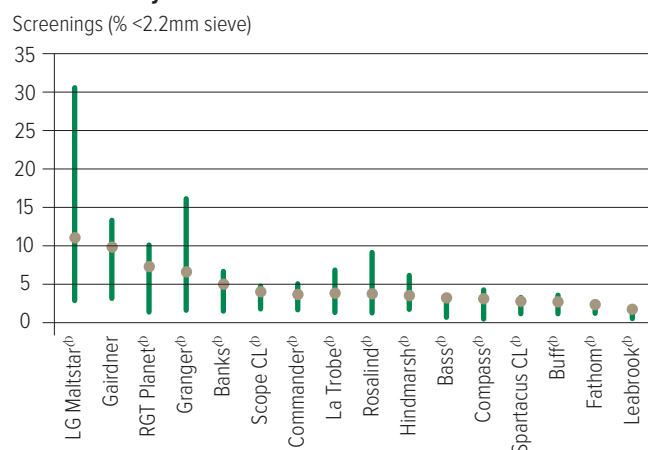
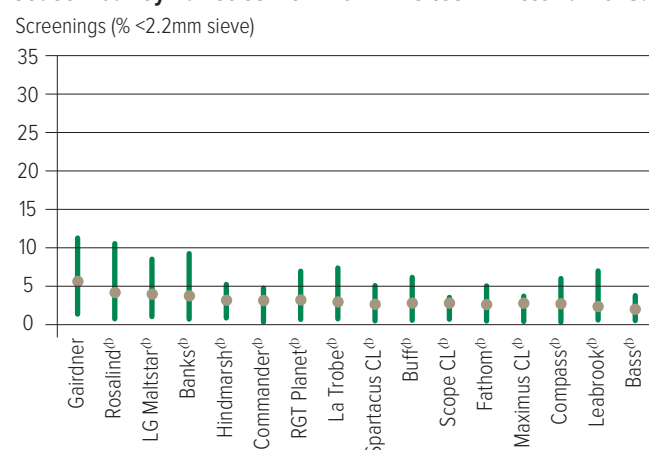


FIGURE 2 Test weight (kg/hl) comparisons for main season barley varieties from 16 NVT sites in SA 2018.

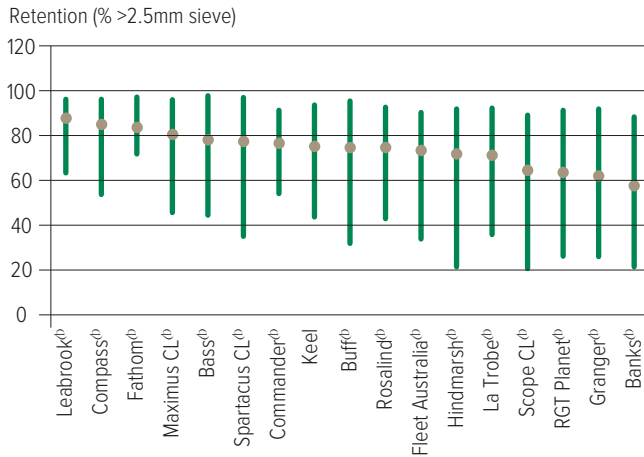
Test weight (kg/hl)



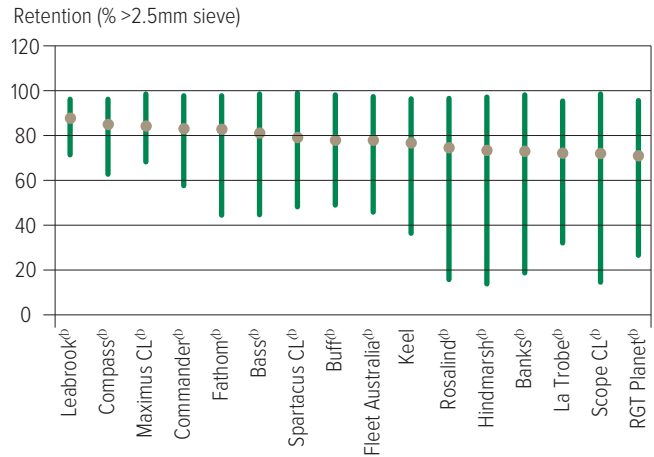
**FIGURE 3 Test weight (kg/hl) comparisons for main season barley varieties from 11 NVT sites in Victoria 2019.****FIGURE 4 Test weight (kg/hl) comparisons for main season barley varieties from 10 NVT sites in Victoria 2018.****FIGURE 5 Screenings (<2.2mm) comparisons for main season barley varieties from 15 NVT sites in SA 2019.****FIGURE 6 Screenings (<2.2mm) comparisons for main season barley varieties from 16 NVT sites in SA 2018.****FIGURE 7 Screenings (<2.2mm) comparisons for main season barley varieties from 11 NVT sites in Victoria 2019.****FIGURE 8 Screenings (<2.2mm) comparisons for main season barley varieties from 10 NVT sites in Victoria 2018.**



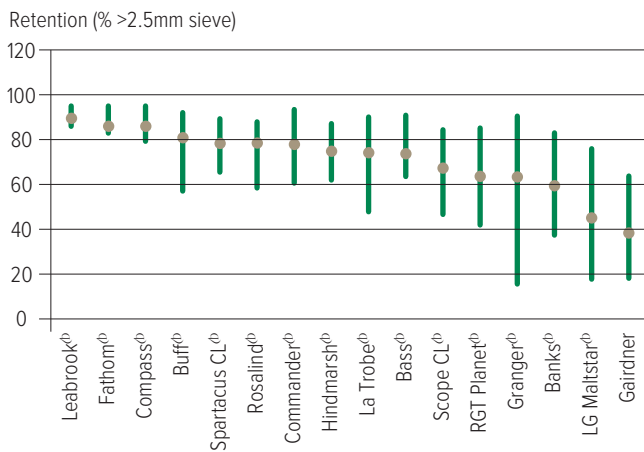
**FIGURE 9 Retention (>2.5mm) comparisons for main season barley varieties from 15 NVT sites in SA 2019.**



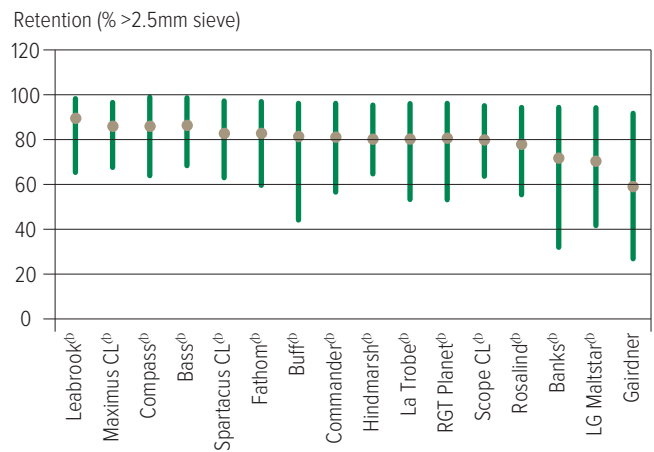
**FIGURE 10 Retention (>2.5mm) comparisons for main season barley varieties from 16 NVT sites in SA 2018.**



**FIGURE 11 Retention (>2.5mm) comparisons for main season barley varieties from 11 NVT sites in Victoria 2019.**



**FIGURE 12 Retention (>2.5mm) comparisons for main season barley varieties from 10 NVT sites in Victoria 2018.**



## BARLEY VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following two tables contain varietal ratings for the predominant diseases of barley in Wimmera and Upper SE South Australia. As regionally specific differences in varietal reactions to some diseases can

occur, varietal responses for both South Australia and Victoria are provided.

These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to Wimmera and Upper SE South Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 7 Barley disease guide for South Australia.**

Variety	CCN	Leaf rust	Net form net blotch	Spot form net blotch	Leaf scald	Powdery mildew	Blackpoint
LG Alestar <sup>db</sup>	R <sup>^</sup>	R-MS	MR-S	MSS	MS-SVS	RMR	MRMS
Banks <sup>db</sup>	S	MR-S	R-MRMS	MRMS-S	R-SVS	MR-MS	MS
Buloke <sup>db</sup>	S		MR		MRMS-S	RMR	MS
Commander <sup>db</sup>	R	MS-S	MS-VS	MSS	MR-SVS	MRMS	MSS
Compass <sup>db</sup>	R	SVS	MR-MSS	MRMS-MSS	MR-SVS	MRMS-S	MSS
Fathom <sup>db</sup>	R	MRMS-S	MS-VS	RMR	R-S	MRMS	MSS
Flinders <sup>db</sup>	S	MRMS-S	MRMS	MRMS-S	MR-SVS	RMR	MRMS
Granger <sup>db</sup>	R	MR-MS	R-MSS	MS-S	MRMS-SVS	R	MS
Hindmarsh <sup>db</sup>	R	MRMS-S	MR-MS	S	R-SVS	MR-SVS	MSS
Keel	R	VS	S	MR	R-SVS	SVS	MSS
Leabrook <sup>db</sup>	MRMS	MS-SVS	MR-MS	MR-MS	R-SVS	MR-MS	MSS
Maritime <sup>db</sup>	R		R-VS		MR-SVS	S	MSS
Maximus CL <sup>db</sup>	R	MS-S	RMR-MRMS	MRMS-MS	R-MRMS	MR-S	MSS
Oxford	S	R-MS	MR-VS	MS-S	MS-SVS	R	MR
RGT Planet <sup>db</sup>	R <sub>p</sub>	MR-MS	MR-SVS	S-SVS	R-SVS	R	MRMS
Rosalind <sup>db</sup>	R	MR-MS	MR	MS-S	MR-S	MRMS-S	MSS
Schooner	VS	S-VS	MR	MS	MS-S	SVS	MS
Scope CL <sup>db</sup>	S	MS-SVS	MR	MS-S	MRMS-SVS	RMR	MS
Spartacus CL <sup>db</sup>	R	MR-S	MSS-SVS	S	R-SVS	MR-SVS	MSS
Westminster <sup>db</sup>		R-MRMS	R-S	S	R-S	R	MRMS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, *p* = provisional rating,

- hyphen indicates a range of reactions, ^ line contains a few susceptible off types.

TABLE 8 Barley disease guide for Victoria.

Variety	Leaf scald	Spot form net blotch	Net form net blotch	Powdery mildew	Leaf rust	CCN	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )
LG Alestar <sup>db</sup>	S	S	S	RMR	MS	R <sup>^</sup>	MR	MR
Banks <sup>db</sup>	SVS	S	MRMS	MRMS	S	S	MRMS	MR
Bottler <sup>db</sup>	SVS	S	MS	R	MS		MS	RMR
Buff <sup>db</sup>	SVS	S	MS	S	SVS		MRMS	MRMS
Commander <sup>db</sup>	SVS	MSS	MS#	MRMS	S	R	MRMS	MRMS
Compass <sup>db</sup>	SVS	MS	MSS	MRMS	SVS	R	MRMS	MR
Fairview <sup>db</sup>	SVS	S	SVS	R	S		MR	MR
Fathom <sup>db</sup>	S	RMR	MS	MRMS	S	R	MRMS	MR
Gairdner	SVS	S	MRMS#	SVS	S	S	MRMS	MSS
Granger <sup>db</sup>	SVS	S	MSS	RMR	MS	R	MRMS	MRMS
Hindmarsh <sup>db</sup>	SVS	SVS	MS	SVS	S	R	MRMS	MRMS
La Trobe <sup>db</sup>	SVS	S	MS	MS#	S	R	MRMS	MRMS
Leabrook <sup>db</sup>	SVS	MS	MR <sub>p</sub>	MRMS	SVS	MRMS	MR	RMR
Maximus CL <sup>db</sup>	MRMS	MS	MRMS	S	S	R	MRMS	MRMS
Oxford	SVS	S	VS	R	MS	S	MR	MR
RGT Planet <sup>db</sup>	SVS	S	SVS	R	MS	R <sub>p</sub>	MRMS	MR
Rosalind <sup>db</sup>	S	S	MR	SVS	MR	R	MRMS	MR
Scope CL <sup>db</sup>	S	MSS	MR#	RMR	S	S	MRMS	MRMS
Shepherd <sup>db</sup>	VS	SVS	MSS	S	MRMS		MRMS	MSS
Spartacus CL <sup>db</sup>	SVS	SVS	MSS	SVS	S	R	MRMS	MRMS
Westminster <sup>db</sup>	MRMS	S	MR#	R	MRMS		MRMS	MS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sub>p</sub> = provisional rating, # may be more susceptible to new pathotypes, ^ line contains a few susceptible off types.

# OAT

## NEW OAT VARIETIES

The following information is for oat varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Bilby <sup>db</sup>	National Oat Breeding Program	2.50	High grain yield potentials and high $\beta$ -glucan content with bright plump grain and high groat per cent leading to higher milling yield for processing.
Koorabup <sup>db</sup>	National Oat Breeding Program	2.00	Has the best Septoria resistance of any current hay or milling variety. It has excellent colour and good stem diameter for hay production.

\* EPR amount is ex-GST, <sup>db</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FABA BEAN

FIELD PEA

LENTIL

LUPIN



## OAT VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Bordertown oat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.53</b>	<b>5.55</b>	<b>5.27</b>	<b>3.06</b>	<b>4.99</b>
Bannister <sup>db</sup>	103	136	116	104	110
Bilby <sup>db</sup>	119	128	110	100	104
Williams <sup>db</sup>	96	120	115	99	112
Kowari <sup>db</sup>	117	117	101	94	98
Wombat	87	110	103	106	105
Possum	107	108	98	97	98
Mitika <sup>db</sup>	110	113	95	91	96
Durack <sup>db</sup>	108	86	92	89	93
Yallara <sup>db</sup>	91	62	92	99	93
Koorabup <sup>db</sup>	83	63	87	92	88
<b>Sowing date</b>	<b>25 May</b>	<b>23 May</b>	<b>17 May</b>	<b>6 Jun</b>	<b>24 May</b>
<b>Rainfall J–M (mm)</b>	<b>51</b>	<b>109</b>	<b>75</b>	<b>21</b>	<b>18</b>
<b>Rainfall A–O (mm)</b>	<b>221</b>	<b>490</b>	<b>395</b>	<b>351</b>	<b>346</b>

For more information click this [LINK](#)

## OAT VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following table contains varietal ratings for the predominant diseases of oat in South Australia

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Padthaway oat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>			<b>3.37</b>	<b>3.74</b>	<b>3.38</b>
Williams <sup>db</sup>	No trial	No trial	151	98	94
Bannister <sup>db</sup>			135	100	106
Bilby <sup>db</sup>			109	99	117
Wandering <sup>db</sup>			107	96	117
Kojonup <sup>db</sup>			121	102	86
Kowari <sup>db</sup>			93	101	112
Mitika <sup>db</sup>			87	103	106
Durack <sup>db</sup>			89	101	96
Carrolup			96	111	71
Yallara <sup>db</sup>			93	101	84
<b>Sowing date</b>			<b>11 May</b>	<b>24 May</b>	<b>4 Jun</b>
<b>Rainfall J–M (mm)</b>			<b>104</b>	<b>26</b>	<b>21</b>
<b>Rainfall A–O (mm)</b>			<b>419</b>	<b>354</b>	<b>291</b>

For more information click this [LINK](#)

and Victoria. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 3 Oat disease guide for South Australia and Victoria.**

Variety	Stem rust	Leaf (crown) rust	Barley yellow dwarf virus (BYDV)	Septoria blotch	Bacterial blight	Red leather leaf
Bannister <sup>db</sup>	S	S	MRMS	MSS	S	MSS
Bilby <sup>db</sup>	S	MR	MRMS <sub>p</sub>	SVS	S	MS
Durack <sup>db</sup>	S	MSS	MSS	S	S	S
Koorabup <sup>db</sup>	S	MSS	MSS <sub>p</sub>	MRMS-SVS <sub>p</sub>	MSS	SVS
Kowari <sup>db</sup>	S	S	MSS	S	MSS	MS
Mitika <sup>db</sup>	S	S	S	SVS	MSS <sub>p</sub>	S
Williams <sup>db</sup>	S	MRMS	MRMS	MS	MSS	MS
Wombat	S	SVS	MRMS	MR-MSS <sub>p</sub>	S	S
Yallara <sup>db</sup>	S	MSS	MSS	MR-S <sub>p</sub>	MSS	SVS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sub>p</sub> = provisional rating,

- hyphen indicates a range of reactions.

# CANOLA

## NEW CANOLA VARIETIES

The following information is for canola varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Hyola® 540XC	Pacific Seeds	n/a	Mid to mid-early maturing GM dual herbicide tolerant hybrid. World-first TruFlex® + Clearfield® tolerant hybrid in a new Australian canola market segment to cater for imidazoline soil residues and the use of glyphosate in-crop. Adapted growing zones are from 1.5t/ha to 3.5t/ha, medium-tall plant height, excellent early vigour, moderate oil content and yields similar to Hyola® 404RR.
HyITec® Trident	Nuseed Pty Ltd	10.00	Early maturity hybrid canola with medium-tall plant height. Suited to low-medium rainfall areas.
HyITec® Trifecta	Nuseed Pty Ltd	10.00	Not supplied
InVigor® R 4022P	BASF Australia	n/a	Not supplied
VICTORY® V75-03CL	Cargill	n/a	Mid-maturing specialty hybrid.
Xseed™ Raptor	Nuseed Pty Ltd	n/a	An early-mid maturing hybrid. Suited to medium-high rainfall areas. Medium plant height.

n/a not available, \* EPR amount is ex-GST, <sup>Ⓢ</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

## CANOLA VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Bordertown mid season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.86</b>	<b>2.70</b>	<b>3.45</b>	<b>2.56</b>	<b>2.81</b>
Saintly CL	134	116	106	104	112
Pioneer® 43Y92 CL		115	104	105	112
Pioneer® 45Y93 CL			112		108
Pioneer® 44Y90 CL	114	113	108	104	109
VICTORY® V7002CL			99	97	96
VICTORY® V75-03CL					95
Hyola® 575CL	90	91	96	95	94
<b>Sowing date</b>	<b>25 May</b>	<b>24 May</b>	<b>17 May</b>	<b>14 May</b>	<b>8 May</b>
<b>Rainfall J–M (mm)</b>	<b>51</b>	<b>109</b>	<b>48</b>	<b>21</b>	<b>18</b>
<b>Rainfall A–O (mm)</b>	<b>221</b>	<b>490</b>	<b>123</b>	<b>351</b>	<b>346</b>

For more information click this [LINK](#)

**TABLE 3 Minyip mid season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.66</b>	<b>4.38</b>	<b>3.67</b>		<b>1.88</b>
Pioneer® 45Y93 CL			110	Trial failed	115
Saintly CL	129	110			115
Pioneer® 43Y92 CL		109	105		114
Pioneer® 44Y90 CL	114	110	108		113
Pioneer® 45Y91 CL		106	104		108
VICTORY® V7002CL			97		97
VICTORY® V75-03CL					94
Hyola® 575CL	86	94	94		93
<b>Sowing date</b>	<b>29 Apr</b>	<b>29 Apr</b>	<b>27 Apr</b>	<b>4 May</b>	<b>1 May</b>
<b>Rainfall J–M (mm)</b>	<b>7</b>	<b>83</b>	<b>72</b>	<b>17</b>	<b>11</b>
<b>Rainfall A–O (mm)</b>	<b>169</b>	<b>429</b>	<b>284</b>	<b>198</b>	<b>255</b>

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Kaniva mid season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>		<b>2.77</b>	<b>2.46</b>	<b>1.91</b>	<b>1.93</b>
Pioneer® 45Y93 CL	Trial failed		111	107	108
Pioneer® 44Y90 CL		117	108	106	107
Saintly CL		120	106	101	105
Pioneer® 43Y92 CL		117	105	102	105
Pioneer® 45Y91 CL		112	105	102	104
VICTORY® V7002CL			98	96	97
VICTORY® V75-03CL				99	98
Hyola® 575CL		92	95	93	95
<b>Sowing date</b>	<b>30 Apr</b>	<b>29 Apr</b>	<b>1 May</b>	<b>10 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>67</b>	<b>103</b>	<b>47</b>	<b>18</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>181</b>	<b>428</b>	<b>342</b>	<b>295</b>	<b>271</b>

For more information click this [LINK](#)

**TABLE 4 Keith early season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.66</b>	<b>2.38</b>	<b>1.73</b>	<b>1.50</b>	<b>2.64</b>
Pioneer® 43Y92 CL		120	110	105	99
Pioneer® 44Y90 CL	130	116	108	106	103
VICTORY® V7002CL			96	106	93
Hyola® 575CL	74	97	97	91	88
<b>Sowing date</b>	<b>21 May</b>	<b>23 May</b>	<b>5 May</b>	<b>16 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>73</b>	<b>116</b>	<b>54</b>	<b>17</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>188</b>	<b>431</b>	<b>362</b>	<b>290</b>	<b>244</b>

For more information click this [LINK](#)

**TABLE 5 Kaniva mid season RR canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>		<b>2.77</b>	<b>2.46</b>	<b>1.91</b>	<b>1.93</b>
InVigor® R 4022P	Trial failed				107
Pioneer® 43Y29 RR			109		107
Pioneer® 45Y25 RR		108	106	106	105
InVigor® R 5520P		114	104	98	102
Pioneer® 44Y27 RR		107	103	105	104
Xseed™ Raptor					105
Nuseed® GT-53		94	101	109	103
DG 408RR		99		103	102
Hyola® 506RR			99	101	100
Hyola® 410XX					101
<b>Sowing date</b>	<b>30 Apr</b>	<b>29 Apr</b>	<b>1 May</b>	<b>10 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>67</b>	<b>103</b>	<b>47</b>	<b>18</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>181</b>	<b>428</b>	<b>342</b>	<b>295</b>	<b>271</b>

For more information click this [LINK](#)**TABLE 6 Minyip mid season RR canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.66</b>	<b>4.38</b>	<b>3.67</b>		<b>1.88</b>
InVigor® R 4022P				Trial failed	124
Pioneer® 43Y29 RR			107		115
Pioneer® 44Y27 RR		105	105		107
InVigor® R 5520P		106	102		109
Pioneer® 45Y25 RR	85	106	107		105
Xseed™ Raptor					101
Nuseed® GT-53	104	101	105		97
DG 408RR		101	102		100
Hyola® 410XX					97
Hyola® 506RR			100		99
<b>Sowing date</b>	<b>29 Apr</b>	<b>29 Apr</b>	<b>27 Apr</b>	<b>4 May</b>	<b>1 May</b>
<b>Rainfall J–M (mm)</b>	<b>7</b>	<b>83</b>	<b>72</b>	<b>17</b>	<b>11</b>
<b>Rainfall A–O (mm)</b>	<b>169</b>	<b>429</b>	<b>284</b>	<b>198</b>	<b>255</b>

For more information click this [LINK](#)**TABLE 7 Bordertown mid season TT canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.86</b>	<b>2.70</b>	<b>3.45</b>	<b>2.56</b>	<b>2.81</b>
HyTTec® Trifecta					116
InVigor® T 4510		118	109	108	113
HyTTec® Trophy			107	110	111
DG 670TT		112	111	103	107
Hyola® 350TT		110		105	108
Hyola® 550TT				107	107
SF Ignite TT		110	112	102	104
Pioneer® 45T03 TT				99	101
Monola® 416TT	86	96			95
<b>Sowing date</b>	<b>25 May</b>	<b>24 May</b>	<b>17 May</b>	<b>14 May</b>	<b>8 May</b>
<b>Rainfall J–M (mm)</b>	<b>51</b>	<b>109</b>	<b>48</b>	<b>21</b>	<b>18</b>
<b>Rainfall A–O (mm)</b>	<b>221</b>	<b>490</b>	<b>123</b>	<b>351</b>	<b>346</b>

For more information click this [LINK](#)**TABLE 8 Kaniva mid season TT canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>		<b>2.77</b>	<b>2.46</b>	<b>1.91</b>	<b>1.93</b>
InVigor® T 4510	Trial failed	121	109	109	110
HyTTec® Trophy			109	114	111
DG 670TT		119	110	106	107
HyTTec® Trident				119	111
SF Turbine TT		108	104	105	104
Hyola® 350TT			103	104	104
Hyola® 550TT				106	104
Pioneer® 45T03 TT				99	101
SF Spark TT					101
Hyola® 530XT					100
<b>Sowing date</b>	<b>30 Apr</b>	<b>29 Apr</b>	<b>1 May</b>	<b>10 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>67</b>	<b>103</b>	<b>47</b>	<b>18</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>181</b>	<b>428</b>	<b>342</b>	<b>295</b>	<b>271</b>

For more information click this [LINK](#)

**TABLE 9 Minyip mid season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.66	4.38	3.67		1.88
InVigor® T 4510		113	111	Trial failed	116
HyTtec® Trophy			113		113
HyTtec® Trident					107
DG 670TT		111			113
Hyola® 350TT			104		108
SF Turbine TT	115	105	105		107
Hyola® 550TT					104
SF Spark TT					103
Pioneer® 45T03 TT					104
Hyola® 530XT					100
Sowing date	29 Apr	29 Apr	27 Apr	4 May	1 May
Rainfall J–M (mm)	7	83	72	17	11
Rainfall A–O (mm)	169	429	284	198	255

For more information click this [LINK](#)**TABLE 10 Keith early season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.38	1.73	1.50	2.64
InVigor® T 4510	Trial failed	120	110	110	109
HyTtec® Trophy			109	109	108
InVigor® T 3510				106	108
HyTtec® Trident				126	108
Hyola® 550TT					106
Pioneer® 44T02 TT		102	103	111	107
Hyola® 350TT			102	116	108
SF Spark TT					102
Monola® 416TT		113			94
ATR Bonito <sup>®</sup>		105	101	92	90
Sowing date	21 May	23 May	5 May	16 May	7 May
Rainfall J–M (mm)	73	116	54	17	16
Rainfall A–O (mm)	188	431	362	290	244

For more information click this [LINK](#)**TABLE 11 Bordertown mid season conventional canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.86	2.70	3.45	2.56	2.81
Nuseed® Diamond	135	109	100	103	108
Nuseed® Quartz		109	103	107	107
AV-Garnet <sup>®</sup>	75	89	98	94	91
Sowing date	25 May	24 May	17 May	14 May	8 May
Rainfall J–M (mm)	51	109	48	21	18
Rainfall A–O (mm)	221	490	123	351	346

For more information click this [LINK](#)**TABLE 12 Minyip mid season conventional canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.66	4.38	3.67		1.88
Nuseed® Quartz		107	108	Trial failed	106
Nuseed® Diamond	131	104			109
AV-Garnet <sup>®</sup>	72	94	95		92
Sowing date	29 Apr	29 Apr	27 Apr	4 May	1 May
Rainfall J–M (mm)	7	83	72	17	11
Rainfall A–O (mm)	169	429	284	198	255

For more information click this [LINK](#)**TABLE 13 Keith early season conventional canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.38	1.73	1.50	2.64
Nuseed® Quartz	Trial failed	112	107	111	108
Nuseed® Diamond		99	103	119	114
AV-Garnet <sup>®</sup>		87	90	82	94
Sowing date	21 May	23 May	5 May	16 May	7 May
Rainfall J–M (mm)	73	116	54	17	16
Rainfall A–O (mm)	188	431	362	290	244

For more information click this [LINK](#)

## CANOLA VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following two tables contain varietal ratings for the predominant diseases of canola in Wimmera and Upper SE South Australia. As regionally specific differences in varietal reactions to some diseases can

occur, varietal responses for both South Australia and Victoria are provided.

These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to Wimmera and Upper SE South Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 14 Canola disease guide for South Australia.**

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
CONVENTIONAL VARIETIES					
AV-Garnet <sup>Ⓓ</sup>	MS				Open pollinated
Nuseed® Diamond	MR	R	R	R	Hybrid
Nuseed® Quartz	R				Hybrid
VICTORY® V3002	R-MR	R	R	R	High stability oil, hybrid
TRIAZINE-TOLERANT VARIETIES					
ATR Bonito <sup>Ⓓ</sup>	MS	R-MR	R	R	Open pollinated
ATR Mako <sup>Ⓓ</sup>	MR	R-MR	R	R	Open pollinated
ATR Stingray <sup>Ⓓ</sup>	MR	R	R	R	Open pollinated
ATR Wahoo <sup>Ⓓ</sup>	MS				Open pollinated
DG 670TT	MR		R	R	Hybrid
Hyola® 350TT	R	R	R	R	Hybrid
Hyola® 550TT	R			R	Hybrid
Hyola® 559TT	R			R	Hybrid
Hyola® 650TT	R	R	R	R	Hybrid
HyTTec® Trident	R				Hybrid
HyTTec® Trifecta	R				Hybrid
HyTTec® Trophy	R				Hybrid
InVigor® T 3510	MR-MS	MR	R		Hybrid
InVigor® T 4510	MR	R	R	R	Hybrid
Pioneer® 44T02 TT	R		R		Hybrid
Pioneer® 45T03 TT	R		R		Hybrid
SF Ignite TT	MR	R	R	R	Hybrid
SF Spark TT	R	R	R	R	Hybrid
SF Turbine TT	MR-MS	R	R	R	Hybrid
CLEARFIELD® SYSTEM VARIETIES					
Banker CL	MR	R		R	Hybrid
Hyola® 575CL	R	R	R	R	Hybrid
Hyola® 970CL	R	R	R	R	Winter, hybrid
Phoenix CL	R				Winter, hybrid
Pioneer® 43Y92 CL	R		R		Hybrid
Pioneer® 44Y90 CL	R	R	R	R	Hybrid
Pioneer® 45Y91 CL	R-MR	R	R	R	Hybrid
Pioneer® 45Y93 CL	R		R	R	Hybrid
Saintly CL	MR	R		R	Hybrid
SF Edimax CL	R-MR				Winter, hybrid
VICTORY® V7001CL	R-MR	R	R	R	High stability oil, hybrid
VICTORY® V7002CL	R-MR	R	R	R	High stability oil, hybrid
VICTORY® V75-03CL	R-MR	R	R	R	High stability oil, hybrid
CLEARFIELD® AND TRIAZINE-TOLERANT VARIETIES					
Hyola® 580CT	R	R	R	R	Hybrid

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, - hyphen indicates a range of reactions.

Note: Cultivars with higher Blackleg ratings may be a result of screening cultivars in recent years that have been less conducive to fungal pathogens, such as Blackleg. If sowing crops in May/June into cold and wet conditions, Blackleg severity may be higher than observed in recent times.



TABLE 15 Canola disease guide for Victoria.

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
CONVENTIONAL VARIETIES					
AV-Garnet <sup>db</sup>	MS				Open pollinated
Nuseed® Diamond	MR	R	R	R	Hybrid
Nuseed® Quartz	R				Hybrid
VICTORY® V3002	R-MR	R	R	R	High stability oil, hybrid
TRIAZINE-TOLERANT VARIETIES					
ATR Bonito <sup>db</sup>	MS	R-MR	R	R	Open pollinated
ATR Mako <sup>db</sup>	MR	R-MR	R	R	Open pollinated
ATR Stingray <sup>db</sup>	MR	R	R	R	Open pollinated
ATR Wahoo <sup>db</sup>	MS				Open pollinated
DG 670TT	MR		R	R	Hybrid
Hyola® 350TT	R	R	R	R	Hybrid
Hyola® 550TT	R			R	Hybrid
Hyola® 559TT	R			R	Hybrid
Hyola® 650TT	R	R	R	R	Hybrid
HyTTec® Trident	R				Hybrid
HyTTec® Trifecta	R				Hybrid
HyTTec® Trophy	R				Hybrid
InVigor® T 3510	MR-MS	MR	R		Hybrid
InVigor® T 4510	MR	R	R	R	Hybrid
Monola® 416TT	R-MR				High stability oil, open pollinated
Pioneer® 44T02 TT	R		R		Hybrid
Pioneer® 45T03 TT	R		R		Hybrid
SF Ignite TT	MR	R	R	R	Hybrid
SF Spark TT	R	R	R	R	Hybrid
SF Turbine TT	MR-MS	R	R	R	Hybrid
CLEARFIELD® SYSTEM VARIETIES					
Banker CL	MR	R		R	Hybrid
Hyola® 575CL	R	R	R	R	Hybrid
Hyola® 970CL	R	R	R	R	Winter, hybrid
Phoenix CL	R				Winter, hybrid
Pioneer® 43Y92 CL	R		R		Hybrid
Pioneer® 44Y90 CL	R	R	R	R	Hybrid
Pioneer® 45Y91 CL	R-MR	R	R	R	Hybrid
Pioneer® 45Y93 CL	R		R	R	Hybrid
Saintly CL	MR	R		R	Hybrid
SF Edimax CL	R-MR				Winter, hybrid
VICTORY® V7001CL	R-MR	R	R	R	High stability oil, hybrid
VICTORY® V7002CL	R-MR	R	R	R	High stability oil, hybrid
VICTORY® V75-03CL	R-MR	R	R	R	High stability oil, hybrid
CLEARFIELD® AND TRIAZINE-TOLERANT VARIETIES					
Hyola® 580CT	R	R	R	R	Hybrid

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, - hyphen indicates a range of reactions.

Note: Cultivars with higher Blackleg ratings may be a result of screening cultivars in recent years that have been less conducive to fungal pathogens, such as Blackleg.

If sowing crops in May/June into cold and wet conditions, Blackleg severity may be higher than observed in recent times.

**TABLE 15 Canola disease guide for Victoria (continued).**

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
ROUNDUP READY® VARIETIES					
DG 408RR	MR-MS		R	R	Hybrid
Hyola® 404RR	R-MR			R	Hybrid
InVigor® R 3520	R-MR	R	R		Hybrid
InVigor® R 5520P	MR	R	R		Hybrid
Nuseed® GT-53	R				Hybrid
Pioneer® 43Y23 RR	R-MR				Hybrid
Pioneer® 43Y29 RR	R-MR		R	R	Hybrid
Pioneer® 44Y27 RR	R-MR		R		Hybrid
VICTORY® V5003RR	R-MR	R	R	R	High stability oil, hybrid
ROUNDUP READY® AND TRIAZINE-TOLERANT VARIETIES					
BASF 3000 TR	MS-S	MR	R	R	Hybrid
TRUFLEX® HYBRID VARIETIES					
Hyola® 410XX	R-MR			R	Hybrid
InVigor® R 4022P	MR		R		Hybrid
Xseed™ Raptor	R				Hybrid
TRUFLEX® AND CLEARFIELD® VARIETIES					
Hyola® 540XC	R				Hybrid
TRUFLEX® AND TRIAZINE-TOLERANT VARIETIES					
Hyola® 530XT	MR				Hybrid

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, - hyphen indicates a range of reactions.

Note: Cultivars with higher Blackleg ratings may be a result of screening cultivars in recent years that have been less conducive to fungal pathogens, such as Blackleg. If sowing crops in May/June into cold and wet conditions, Blackleg severity may be higher than observed in recent times.

# CHICKPEA

## NEW CHICKPEA VARIETIES

The following information is for chickpea varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
PBA Royal <sup>db</sup>	National Chickpea Initiative	6.50	Early-mid flowering kabuli chickpea with high proportion of 8mm size grain. Bred as an improvement over Genesis™ 090.

\* EPR amount is ex-GST, <sup>db</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FABA BEAN

FIELD PEA

LENTIL

LUPIN

## CHICKPEA VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Kaniva desi chickpea.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>			<b>2.44</b>	<b>2.12</b>	<b>1.41</b>
Ambar <sup>db</sup>	Trial failed	Trial failed	105	116	104
PBA Striker <sup>db</sup>			107	107	110
Neelam <sup>db</sup>			101	110	102
PBA Slasher <sup>db</sup>			102	104	105
PBA Maiden <sup>db</sup>			98	92	103
<b>Sowing date</b>	<b>2 Jun</b>	<b>31 May</b>	<b>1 Jun</b>	<b>5 Jun</b>	<b>30 May</b>
<b>Rainfall J–M (mm)</b>	<b>67</b>	<b>103</b>	<b>47</b>	<b>18</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>181</b>	<b>428</b>	<b>342</b>	<b>295</b>	<b>271</b>

For more information click this [LINK](#)

**TABLE 3 Kaniva kabuli chickpea.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>			<b>2.44</b>	<b>2.12</b>	<b>1.41</b>
Genesis™ 090	Trial failed	Trial failed	110	121	110
PBA Royal <sup>db</sup>			103	108	107
Almaz <sup>db</sup>			102	109	102
Genesis™ Kalkee			100	105	96
PBA Monarch <sup>db</sup>			101	98	101
<b>Sowing date</b>	<b>2 Jun</b>	<b>31 May</b>	<b>1 Jun</b>	<b>5 Jun</b>	<b>30 May</b>
<b>Rainfall J–M (mm)</b>	<b>67</b>	<b>103</b>	<b>47</b>	<b>18</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>181</b>	<b>428</b>	<b>342</b>	<b>295</b>	<b>271</b>

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Tarranyurk desi chickpea.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>		<b>1.63</b>	<b>1.34</b>	<b>0.78</b>	<b>1.42</b>
Neelam <sup>db</sup>	Trial failed	116	100	96	104
PBA Slasher <sup>db</sup>		110	96	102	104
PBA Maiden <sup>db</sup>		103	98	97	104
PBA Striker <sup>db</sup>		90	90	97	107
Ambar <sup>db</sup>		102	78	89	105
<b>Sowing date</b>	<b>2 Jun</b>	<b>31 May</b>	<b>24 May</b>	<b>4 Jun</b>	<b>30 May</b>
<b>Rainfall J–M (mm)</b>	<b>3</b>	<b>55</b>	<b>72</b>	<b>10</b>	<b>20</b>
<b>Rainfall A–O (mm)</b>	<b>151</b>	<b>380</b>	<b>270</b>	<b>161</b>	<b>249</b>

For more information click this [LINK](#)

**TABLE 4 Tarranyurk kabuli chickpea.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>		<b>1.63</b>	<b>1.34</b>	<b>0.78</b>	<b>1.42</b>
PBA Royal <sup>db</sup>	Trial failed	114	82	104	104
Genesis™ 090		104	85	109	104
PBA Monarch <sup>db</sup>		89	105	92	102
Almaz <sup>db</sup>		105	80	98	101
Genesis™ Kalkee		93	91	103	95
<b>Sowing date</b>	<b>2 Jun</b>	<b>31 May</b>	<b>24 May</b>	<b>4 Jun</b>	<b>30 May</b>
<b>Rainfall J–M (mm)</b>	<b>3</b>	<b>55</b>	<b>72</b>	<b>10</b>	<b>20</b>
<b>Rainfall A–O (mm)</b>	<b>151</b>	<b>380</b>	<b>270</b>	<b>161</b>	<b>249</b>

For more information click this [LINK](#)

## CHICKPEA VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following table contains varietal ratings for the predominant diseases of chickpea in South

Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 5 Chickpea disease guide for South Australia and Victoria.**

Variety	Ascochyta blight (Pathogen group 1)	Ascochyta blight (Pathogen group 2)	Botrytis grey mould	RLN ( <i>Pratylenchus neglectus</i> )	RLN ( <i>Pratylenchus thornei</i> )	RLN ( <i>Pratylenchus thornei</i> )
				Resistance	Resistance	Tolerance
<b>DESI CHICKPEA</b>						
Ambar <sup>db</sup>	S		S	MRMS	MS	
Neelam <sup>db</sup>	S	S	S	MRMS	MS	MI
PBA Maiden <sup>db</sup>	S	MS	S	MRMS	MRMS	IVI
PBA Slasher <sup>db</sup>	S	MS	S	MRMS	MRMS	MTMI
PBA Striker <sup>db</sup>	S	S	S	MRMS	MRMS	
<b>KABULI CHICKPEA</b>						
Almaz <sup>db</sup>	S	MS	S	MRMS	S	VI
PBA Royal <sup>db</sup>	MS	MR	S	MR	MS <sub>p</sub>	MTMI
Genesis™ 090	MS	R/MR	S	MRMS	MS	MI
Genesis™ Kalkee	MS	MS	S	MRMS	MS	
PBA Monarch <sup>db</sup>	S	MS	S	MRMS	MS	MII

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, / indicates pathotype differences.

# FABA BEAN

## NEW FABA BEAN VARIETIES

The following information is for faba bean varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
PBA Amberley <sup>db</sup>	National Faba Bean Initiative	3.50	High rainfall southern region variety, first to be bred with resistance (MR) to Chocolate spot. Highest level of disease resistance of all current varieties.

\* EPR amount is ex-GST, <sup>db</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FABA BEAN

FIELD PEA

LENTIL

LUPIN



## FABA BEAN VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Kaniva faba bean.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.67			3.46	2.28
PBA Amberley <sup>db</sup>	97	Trial failed	Trial failed	103	111
PBA Zahra <sup>db</sup>	94			101	111
PBA Bendoc <sup>db</sup>				100	104
PBA Samira <sup>db</sup>	99			101	106
Nura <sup>db</sup>	94			100	98
Fiesta VF	105			99	95
Farah <sup>db</sup>	100			99	96
PBA Marne <sup>db</sup>	104			99	89
PBA Rana <sup>db</sup>	88			99	93
Sowing date	15 Apr			26 Apr	7 May
Rainfall J–M (mm)	67			18	16
Rainfall A–O (mm)	181			295	271

For more information click this [LINK](#)

**TABLE 3 Wolseley faba bean.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.39	4.57	3.62	3.33	2.94
PBA Zahra <sup>db</sup>	67	112	99	106	108
PBA Samira <sup>db</sup>	98	104	106	104	102
PBA Bendoc <sup>db</sup>		98	99	103	104
PBA Amberley <sup>db</sup>	74	99	101	105	100
Farah <sup>db</sup>	92	100	97	98	97
Fiesta VF	101	100	94	97	100
Nura <sup>db</sup>	61	96	91	97	92
PBA Rana <sup>db</sup>	54	96	96	94	83
PBA Marne <sup>db</sup>	102	88	83	92	98
Sowing date	22 May	10 May	30 May	15 May	15 May
Rainfall J–M (mm)	51	109	48	24	16
Rainfall A–O (mm)	221	478	369	322	263

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Keith faba bean.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.35	4.10	3.18	2.90	2.97
PBA Bendoc <sup>db</sup>		105	100	98	100
PBA Zahra <sup>db</sup>	99	99	100	101	107
PBA Marne <sup>db</sup>	102	102	99	99	103
PBA Amberley <sup>db</sup>	101	110	100	93	97
PBA Samira <sup>db</sup>	101	101	101	100	100
Fiesta VF	100	94	96	101	100
Farah <sup>db</sup>	97	94	96	100	97
Nura <sup>db</sup>	95	99	93	94	93
PBA Rana <sup>db</sup>	88	93	88	93	83
Sowing date	21 May	23 May	10 May	16 May	15 May
Rainfall J–M (mm)	48	101	54	17	16
Rainfall A–O (mm)	194	462	362	290	244

For more information click this [LINK](#)

**TABLE 4 Wonwondah faba bean.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.74		1.85	2.59
PBA Bendoc <sup>db</sup>	Trial failed	93	Trial failed	108	108
PBA Samira <sup>db</sup>		101		104	104
PBA Amberley <sup>db</sup>		95		105	107
PBA Zahra <sup>db</sup>		100		96	106
Fiesta VF		92		98	98
Farah <sup>db</sup>		94		98	96
PBA Marne <sup>db</sup>		95		92	95
Nura <sup>db</sup>		88		95	95
PBA Rana <sup>db</sup>		86		95	87
Sowing date	16 Apr	29 Apr	20 Apr	27 Apr	1 May
Rainfall J–M (mm)	5	84	84	30	3
Rainfall A–O (mm)	140	439	333	220	256

For more information click this [LINK](#)

## FABA BEAN VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following table contains varietal ratings for the predominant diseases of faba bean in South

Australia and Victoria. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 5 Faba bean disease guide for South Australia and Victoria.**

Variety	Ascochyta blight	Cercospora leaf spot	Chocolate spot (botrytis)	RLN ( <i>Pratylenchus neglectus</i> )	RLN ( <i>Pratylenchus thornei</i> )
				Resistance	Resistance
PBA Amberley <sup>Ⓛ</sup>	RMR	S	MR <sup>p</sup>	MR	MS <sup>p</sup>
Farah <sup>Ⓛ</sup>	S	S	S	MR	MS
Fiesta VF	S	S	S	MR	MS
Nura <sup>Ⓛ</sup>	RMR	S	MS	MR	MS
PBA Bendoc <sup>Ⓛ</sup>	MR	S	MS	MR	MRMS <sup>p</sup>
PBA Marne <sup>Ⓛ</sup>	MRMS	S	S	MR	MS <sup>p</sup>
PBA Rana <sup>Ⓛ</sup>	MRMS	S	MS	MR	MS
PBA Samira <sup>Ⓛ</sup>	RMR	S	MS	MR	MRMS
PBA Zahra <sup>Ⓛ</sup>	MRMS	S	MS	MR	MS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sup>p</sup> = provisional rating.

# FIELD PEA

## FIELD PEA VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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 performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

TABLE 1 Mundulla field pea.					
Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.19	3.99	3.07	2.86	2.08
PBA Pearl <sup>db</sup>	109	111	119	98	109
PBA Butler <sup>db</sup>	102	110	114	104	113
PBA Gunyah <sup>db</sup>	95	99	94	100	90
PBA Oura <sup>db</sup>	98	96	97	94	90
PBA Wharton <sup>db</sup>	103	93	88	99	90
Kaspa <sup>db</sup>	89	98	91	98	85
PBA Percy <sup>db</sup>	89	91	89	93	84
Sowing date	12 Jun	23 May	10 May	16 May	31 May
Rainfall J–M (mm)	40	101	75	21	18
Rainfall A–O (mm)	211	475	395	351	346

For more information click this [LINK](#)

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to the *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

TABLE 2 Tarranyurk field pea.					
Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.49	3.40	2.07		2.56
PBA Pearl <sup>db</sup>	107	103	124	No trial	111
PBA Wharton <sup>db</sup>	112	93	112		105
PBA Butler <sup>db</sup>	90	113	91		99
PBA Oura <sup>db</sup>	110	87	113		102
PBA Gunyah <sup>db</sup>	102	97	86		96
PBA Percy <sup>db</sup>	114	72	104		93
Kaspa <sup>db</sup>	93	98	67		89
Sowing date	2 Jun	31 May	24 May		30 May
Rainfall J–M (mm)	3	55	72		20
Rainfall A–O (mm)	151	380	270		249

For more information click this [LINK](#)

## FIELD PEA VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following table contains varietal ratings for the predominant diseases of field pea in South Australia

and Victoria. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 3 Field pea disease guide for South Australia and Victoria.**

Variety	Blackspot ( <i>Ascochyta blight</i> )	Bacterial blight	Downy mildew	Powdery mildew	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )
Kaspa <sup>Ⓛ</sup>	MS	S	S	S	MR	MRMS
PBA Butler <sup>Ⓛ</sup>	MS	MS	S	S	MR	MRMS
PBA Gunyah <sup>Ⓛ</sup>	MS	S	S	S	MR	MRMS
PBA Oura <sup>Ⓛ</sup>	MS	MS	S	S	MR	MRMS
PBA Pearl <sup>Ⓛ</sup>	MS	MS	S	S	MR	MRMS
PBA Percy <sup>Ⓛ</sup>	MS	MRMS	S	S	MR	RMR
PBA Twilight <sup>Ⓛ</sup>	MS	S	S	S	MR	MRMS
PBA Wharton <sup>Ⓛ</sup>	MS	S	S	R	MR	MRMS

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

# LENTIL

## NEW LENTIL VARIETIES

The following information is for lentil varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
PBA HighlandXT <sup>h</sup>	National Lentil Initiative	5.40	Not supplied

\* EPR amount is ex-GST, <sup>h</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FABA BEAN

FIELD PEA

LENTIL

LUPIN

## LENTIL VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Kaniva lentil.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.35</b>	<b>0.90</b>	<b>2.50</b>	<b>2.68</b>	<b>2.23</b>
PBA HighlandXT <sup>Ⓛ</sup>		159	95	104	107
PBA Jumbo2 <sup>Ⓛ</sup>	107	126	108	102	101
PBA Ace <sup>Ⓛ</sup>	77	132	106	104	101
PBA Hallmark XT <sup>Ⓛ</sup>	95	133	92	108	104
PBA Blitz <sup>Ⓛ</sup>	109				89
PBA Bolt <sup>Ⓛ</sup>	101	106	100	100	104
PBA Hurricane XT <sup>Ⓛ</sup>	93	94	94	104	102
Nipper <sup>Ⓛ</sup>	81				86
<b>Sowing date</b>	<b>2 Jun</b>	<b>31 May</b>	<b>1 Jun</b>	<b>5 Jun</b>	<b>30 May</b>
<b>Rainfall J–M (mm)</b>	<b>67</b>	<b>103</b>	<b>47</b>	<b>18</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>181</b>	<b>428</b>	<b>342</b>	<b>295</b>	<b>271</b>

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Mundulla lentil.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.93</b>			<b>2.15</b>	<b>2.25</b>
PBA Jumbo2 <sup>Ⓛ</sup>	107	Trial failed	Trial failed	100	109
PBA HighlandXT <sup>Ⓛ</sup>				104	95
PBA Hurricane XT <sup>Ⓛ</sup>	97			99	102
PBA Hallmark XT <sup>Ⓛ</sup>	98			96	104
PBA Bolt <sup>Ⓛ</sup>	100			102	93
Nipper <sup>Ⓛ</sup>	83			87	103
PBA Ace <sup>Ⓛ</sup>	85				97
PBA Blitz <sup>Ⓛ</sup>	92			89	84
<b>Sowing date</b>	<b>12 Jun</b>	<b>23 May</b>	<b>10 May</b>	<b>16 May</b>	<b>31 May</b>
<b>Rainfall J–M (mm)</b>	<b>40</b>	<b>116</b>	<b>75</b>	<b>21</b>	<b>18</b>
<b>Rainfall A–O (mm)</b>	<b>211</b>	<b>481</b>	<b>395</b>	<b>351</b>	<b>346</b>

For more information click this [LINK](#)

**TABLE 3 Tarranyurk lentil.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.22</b>	<b>2.57</b>			<b>1.57</b>
PBA Jumbo2 <sup>Ⓛ</sup>	105	112	Trial failed	Trial failed	112
PBA HighlandXT <sup>Ⓛ</sup>		107			94
PBA Ace <sup>Ⓛ</sup>	124	98			107
PBA Hallmark XT <sup>Ⓛ</sup>	108	103			91
PBA Blitz <sup>Ⓛ</sup>	102				90
PBA Bolt <sup>Ⓛ</sup>	113	97			98
PBA Hurricane XT <sup>Ⓛ</sup>	99	97			92
Nipper <sup>Ⓛ</sup>	64				79
<b>Sowing date</b>	<b>2 Jun</b>	<b>31 May</b>	<b>24 May</b>	<b>4 Jun</b>	<b>30 May</b>
<b>Rainfall J–M (mm)</b>	<b>3</b>	<b>55</b>	<b>72</b>	<b>10</b>	<b>20</b>
<b>Rainfall A–O (mm)</b>	<b>151</b>	<b>380</b>	<b>270</b>	<b>161</b>	<b>249</b>

For more information click this [LINK](#)



## LENTIL VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following table contains varietal ratings for the predominant diseases of lentil in South Australia

and Victoria. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to South Australian and Victorian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 4 Lentil disease guide for South Australia and Victoria.**

Variety	Ascochyta blight (Pathotype 1 Nipper virulent)	Ascochyta blight (Pathotype 2 Hurricane virulent)	Botrytis grey mould	RLN resistance ( <i>Pratylenchus neglectus</i> )	RLN resistance ( <i>Pratylenchus thornei</i> )
Nipper <sup>db</sup>	MRMS	MR	RMR	RMR	MR
PBA Ace <sup>db</sup>	R	R	MRMS	MR	MRMS
PBA Blitz <sup>db</sup>	MRMS	MR	MR	MR	MRMS
PBA Bolt <sup>db</sup>	MR	MRMS	S	MR	MR
PBA Hallmark XT <sup>db</sup>	RMR	MRMS	RMR	MR <sub>p</sub>	MRMS <sub>p</sub>
PBA HighlandXT <sup>db</sup>	MR	MR	MRMS	MR <sub>p</sub>	MRMS <sub>p</sub>
PBA Hurricane XT <sup>db</sup>	RMR	MRMS	MRMS	MRMS	MRMS
PBA Jumbo2 <sup>db</sup>	R	R	RMR	MR	MRMS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sub>p</sub> = provisional rating.

# LUPIN

## NEW LUPIN VARIETIES

The following information is for lupin varieties released during 2019 and since the *2020 South Australian Crop Sowing Guide* and the *2020 Victorian Crop Sowing Guide* were published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Coyote <sup>Ⓛ</sup>	National Lupin Initiative	3.00	A very widely adapted variety with a maturity similar to Jurien <sup>Ⓛ</sup> offering high and stable yields in all lupin growing areas, particularly WA.

\* EPR amount is ex-GST, <sup>Ⓛ</sup> denotes Plant Breeder's Rights apply.

Refer to *2020 South Australian Crop Sowing Guide* for further information at [grdc.com.au/NVT-south-australian-crop-sowing-guide](http://grdc.com.au/NVT-south-australian-crop-sowing-guide)

Refer to the *2020 Victorian Crop Sowing Guide* for further information at [grdc.com.au/NVT-Victorian-Winter-Crop-Summary](http://grdc.com.au/NVT-Victorian-Winter-Crop-Summary)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FABA BEAN

FIELD PEA

LENTIL

LUPIN

## LUPIN VARIETY YIELD PERFORMANCE – WIMMERA AND UPPER SE SOUTH AUSTRALIA

The following tables contain yield results from the top-performing varieties within each NVT location in the Wimmera and Upper SE South Australia for the past five seasons. Data is 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.

**TABLE 1 Keith narrow-leaf lupin.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>2.98</b>	<b>1.65</b>	<b>1.42</b>	<b>1.24</b>	
Coyote <sup>db</sup>	Trial failed	114	110	113	
PBA Bateman <sup>db</sup>		110		105	112
Mandelup <sup>db</sup>		103	103		93
PBA Gunyidi <sup>db</sup>		104	97		99
Jenabillup <sup>db</sup>		97	96	86	96
PBA Jurien <sup>db</sup>		104	91		76
PBA Barlock <sup>db</sup>		100	94		77
Wonga		91	101	85	84
Jindalee		83	75		84
<b>Sowing date</b>	<b>20 May</b>	<b>25 May</b>	<b>10 May</b>	<b>25 May</b>	<b>18 May</b>
<b>Rainfall J–M (mm)</b>	<b>73</b>	<b>116</b>	<b>54</b>	<b>17</b>	<b>16</b>
<b>Rainfall A–O (mm)</b>	<b>188</b>	<b>431</b>	<b>362</b>	<b>290</b>	<b>244</b>

For more information click this [LINK](#)

The performance of varieties not listed within these tables can be found by further interrogation of the NVT website via the links below each table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website links below each table.

Rainfall is provided for January to March (J–M) and April to October (A–O).

**TABLE 2 Mundulla narrow-leaf lupin.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>0.65</b>	<b>3.47</b>	<b>2.23</b>		<b>3.10</b>
Coyote <sup>db</sup>	112	109	114	Trial failed	
PBA Bateman <sup>db</sup>	105	105			114
PBA Gunyidi <sup>db</sup>	98	102	103		108
Mandelup <sup>db</sup>	100	102	100		106
PBA Jurien <sup>db</sup>	97	108	98		101
Jenabillup <sup>db</sup>	88	95	96		116
PBA Barlock <sup>db</sup>	94	103	94		104
Wonga	87	91	88		111
Jindalee	71	87	83		103
<b>Sowing date</b>	<b>12 Jun</b>	<b>3 Jun</b>	<b>31 May</b>	<b>7 Jun</b>	<b>10 May</b>
<b>Rainfall J–M (mm)</b>	<b>40</b>	<b>116</b>	<b>75</b>	<b>21</b>	<b>18</b>
<b>Rainfall A–O (mm)</b>	<b>211</b>	<b>481</b>	<b>395</b>	<b>351</b>	<b>346</b>

For more information click this [LINK](#)

## LUPIN VARIETY DISEASE RATINGS – SOUTH AUSTRALIA AND VICTORIA

The following table contains varietal ratings for the predominant diseases of lupin in South Australia

and Victoria. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to South Australia and Victoria growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 3 Lupin disease guide for South Australia and Victoria.**

Variety	Anthrachnose resistance	Brown leaf spot	Phomopsis stem infection	Phomopsis pod infection	Pleiochaeta root rot
Coyote <sup>db</sup>	MRMS <sub>p</sub>	MS <sub>p</sub>	MR <sub>p</sub>	MRMS <sub>p</sub>	MRMS <sub>p</sub>
Jenabillup <sup>db</sup>	MS	MRMS	MS	MR	MRMS <sub>p</sub>
Mandelup <sup>db</sup>	MR	MS	RMR	MRMS	MRMS <sub>p</sub>
PBA Barlock <sup>db</sup>	RMR	MS	MR	MR	MRMS <sub>p</sub>
PBA Bateman <sup>db</sup>	MRMS	MS	RMR	MS	MRMS <sub>p</sub>
PBA Gunyidi <sup>db</sup>	MR	MS	RMR	MRMS	MRMS <sub>p</sub>
PBA Jurien <sup>db</sup>	RMR	MS	RMR	MR	MR <sub>p</sub>
Wonga	RMR	MS	MR	MR	MRMS <sub>p</sub>

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, <sub>p</sub> = provisional rating.

# USEFUL LINKS AND FURTHER INFORMATION

## NVT Harvest Reports for all regions

[grdc.com.au/harvestreports](http://grdc.com.au/harvestreports)

## Variety Central

[varietycentral.com.au](http://varietycentral.com.au)

## NVT Overview Podcast (1 November 2018)

[grdc.com.au/news-and-media/audio/podcast/nvt-overview](http://grdc.com.au/news-and-media/audio/podcast/nvt-overview)

## NVT Overview Video (29 October 2019)

[youtu.be/ThGjxFXR\\_ug](https://youtu.be/ThGjxFXR_ug)

## NVT Southern Region (29 October 2019)

[youtu.be/uagizCbCalg](https://youtu.be/uagizCbCalg)

## How to navigate NVT's website (10 February 2019)

[youtu.be/GbasB-xUIQA](https://youtu.be/GbasB-xUIQA)

## How to interpret NVT data (long term yield results) using the NVT website (10 February 2019)

[youtu.be/eS4UbszsEAg](https://youtu.be/eS4UbszsEAg)