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NVT HARVEST REPORT



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GERALDTON

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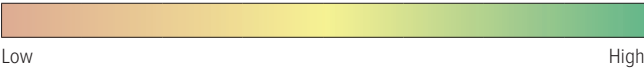
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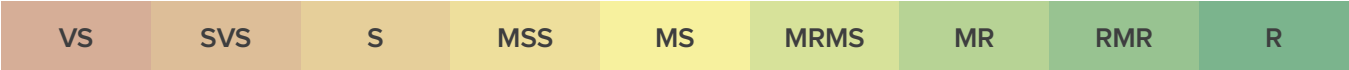
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LEGEND: MEAN VARIETY YIELD PERFORMANCE



Variation from the annual site mean yield

DISEASE RATING COLOUR RANGE



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

Refer to *2020 Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide

INTRODUCTION

This *NVT Harvest Report* provides information to support growers and advisers with decisions on variety selection for Geraldton. 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 Geraldton 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 Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide.

INTERPRETING LONG-TERM YIELD DATA

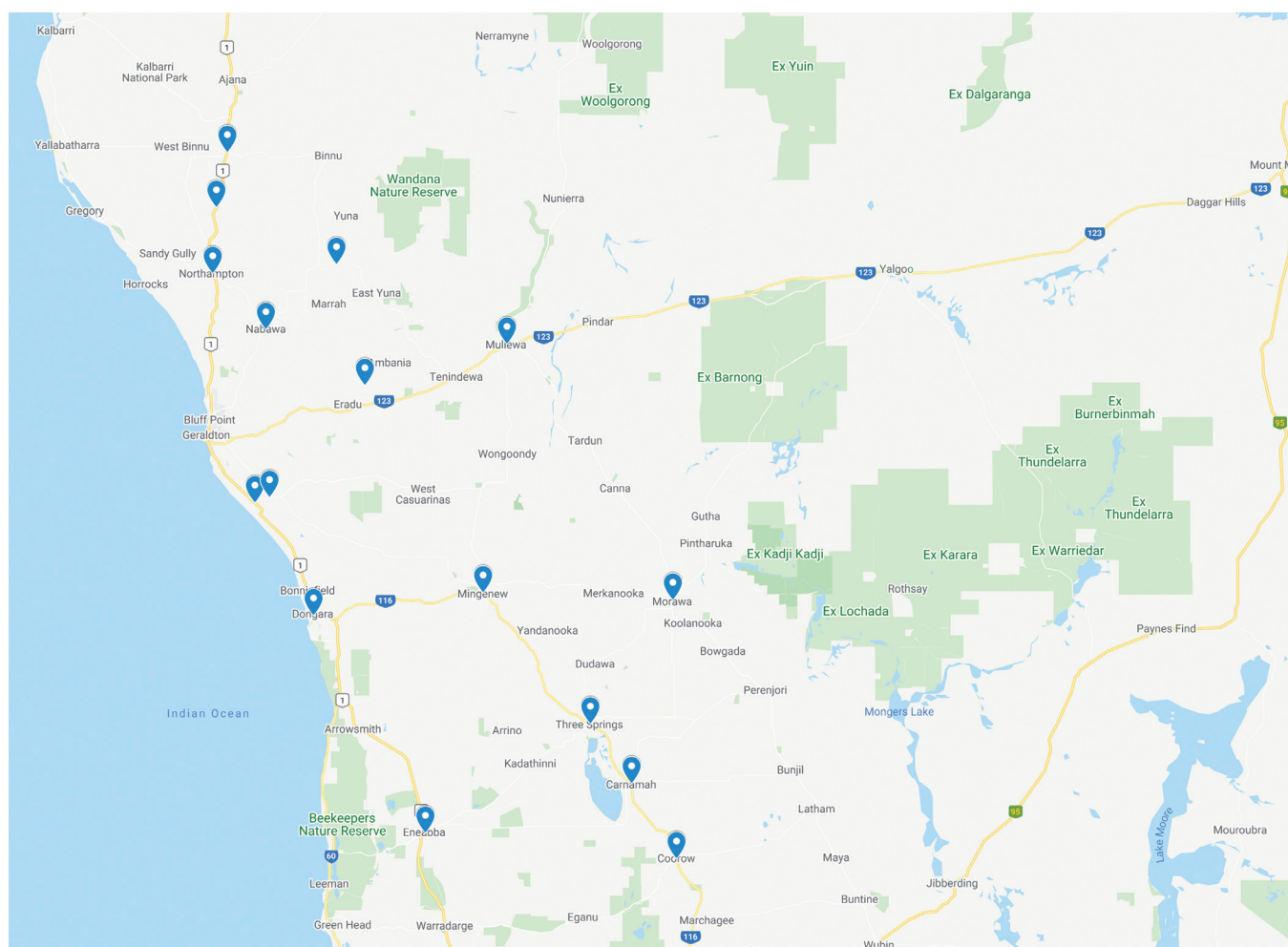
A factor analytic (FA) mixed model approach is used in the multi-environment trial (MET) analysis conducted by GRDC, supported by the Statistics for the Australian Grains Industry (SAGI) program. This approach generates long-term MET values for varieties at an individual trial level.

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 Geraldton 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 Geraldton.

NVT SITE LOCATIONS – GERALDTON 2015–2019

FIGURE 1 Location of NVT trial sites in Geraldton from 2015–2019.



SOURCE: NVT ONLINE

WHEAT

NEW WHEAT VARIETIES

The following information is for wheat varieties released during 2019 and since the 2020 Western Australian Crop Sowing Guide was published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Catapult [♢]	Australian Grain Technologies	3.25	Longer season than Scepter [♢] , with a mid-late maturity allowing growers to achieve Scepter [♢] -like yields when sown in late April. Catapult [♢] has a very flexible sowing window with wide adaptation and is viewed as a great alternative to Trojan [♢] , Magenta [♢] , Cutlass [♢] and Yitpi [♢] . Catapult [♢] offers a unique combination of features to growers with Australian Hard quality (WA/SA/VIC/southern NSW).
EG Jet [♢]	Elders/Seedmark	n/a	Not supplied
LRPB Nyala [♢]	LongReach Plant Breeders Pty Ltd	3.75	Soft biscuit wheat for Western Australia.
RockStar [♢]	InterGrain	3.50	High-yielding, mid-late flowering variety with a similar time to flowering as LRPB Trojan [♢] and Magenta [♢] . 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 [♢] 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 [♢] . RockStar [♢] is an excellent varietal alternative to LRPB Trojan [♢] , Magenta [♢] , Yitpi [♢] and Cutlass [♢] .

n/a not available, * EPR amount is ex-GST, [♢] denotes Plant Breeder's Rights apply.

Refer to 2020 Western Australian Crop Sowing Guide for further information at grdc.com.au/NVT-WA-Sowing-Guide

WHEAT

BARLEY

CANOLA

CHICKPEA

FIELD PEA

LUPIN

WHEAT VARIETY YIELD PERFORMANCE – GERALDTON

The following tables contain yield results from the top-performing varieties within each NVT location in Geraldton 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 Carnamah main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.53		1.73	2.96	
Vixen ^{db}		Trial failed	108	118	Trial failed
LRPB Havoc ^{db}			106	113	
Scepter ^{db}	110		109	107	
RockStar ^{db}				103	
Devil ^{db}			109	107	
Corack ^{db}	101		104	110	
Mace ^{db}	104		104	105	
Ninja ^{db}	107		105	101	
Zen ^{db}	104		103	103	
Hydra ^{db}	104		102	100	
CLEARFIELD® PLUS					
Razor CL Plus ^{db}			102	108	
Chief CL Plus ^{db}			103	101	
Impress CL Plus ^{db}	100		91	103	
Sowing date	18 May	5 May	16 May	25 May	7 Jun
Rainfall J–M (mm)	101	114	223	71	9
Rainfall A–O (mm)	191	250	170	242	235

For more information click this [LINK](#)

TABLE 3 Eneabba main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.78		2.71	4.55	2.68
RockStar [Ⓛ]		Trial failed		110	112
Devil [Ⓛ]			108	108	113
Scepter [Ⓛ]	108		106	105	112
Kinsei [Ⓛ]			111	107	105
Ninja [Ⓛ]	107		105	103	105
Zen [Ⓛ]	103		108	104	104
LRPB Havoc [Ⓛ]			106	101	108
Catapult [Ⓛ]				105	105
Corack [Ⓛ]	100			103	104
Vixen [Ⓛ]			98	100	113
CLEARFIELD® PLUS					
Chief CL Plus [Ⓛ]			109	104	103
Sheriff CL Plus [Ⓛ]			105		102
Razor CL Plus [Ⓛ]			96	93	105
Sowing date	23 May	16 May	25 May	25 May	7 Jun
Rainfall J–M (mm)	41	49	47	63	12
Rainfall A–O (mm)	424	417	272	409	273

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 Coorow main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.70		1.42	3.35	1.43
RockStar ^{db}		Trial failed		106	110
Devil ^{db}			107	110	114
Scepter ^{db}	109		105	109	114
Vixen ^{db}			109	118	117
Ninja ^{db}	111		101	102	105
LRPB Havoc ^{db}			105	113	104
Kinsei ^{db}			103	102	101
Mace ^{db}	97		105	107	109
Catapult ^{db}				100	108
Corack ^{db}	93			107	111
CLEARFIELD® PLUS					
Chief CL Plus ^{db}			100	102	99
Razor CL Plus ^{db}			107	109	110
Sheriff CL Plus ^{db}			100		97
Sowing date	18 May	17 May	16 May	25 May	7 Jun
Rainfall J–M (mm)	108	131	144	71	17
Rainfall A–O (mm)	262	299	173	242	218

For more information click this [LINK](#)

TABLE 4 Eradu main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.48	2.25	2.16	4.16	0.33
RockStar ^{db}				114	99
Devil ^{db}			103	114	109
Scepter ^{db}	106	109	104	112	108
Ninja ^{db}	108	104	109	105	100
Kinsei ^{db}			111	106	97
Vixen ^{db}			82	114	119
Catapult ^{db}				104	104
LRPB Havoc ^{db}		102	91	111	100
Hydra ^{db}	104	103	104	102	101
Cutlass ^{db}	103	99	113	99	97
CLEARFIELD® PLUS					
Chief CL Plus ^{db}		95	106	106	90
Sheriff CL Plus ^{db}		98	104		95
Razor CL Plus ^{db}			84	102	115
Sowing date	14 May	14 May	18 May	25 May	7 Jun
Rainfall J–M (mm)	21	39	156	48	3
Rainfall A–O (mm)	202	233	159	318	270

For more information click this [LINK](#)

TABLE 5 Mingenew main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.80	4.70		3.28	1.62
RockStar [Ⓛ]			Trial failed	103	114
Devil [Ⓛ]				109	116
Scepter [Ⓛ]	108	107		110	112
LRPB Havoc [Ⓛ]		105		124	105
Vixen [Ⓛ]				127	110
Kinsei [Ⓛ]				97	111
Ninja [Ⓛ]	112	107		100	106
Zen [Ⓛ]	101	105		105	107
Corack [Ⓛ]	85	100		115	110
Mace [Ⓛ]	98	99		110	108
CLEARFIELD® PLUS					
Chief CL Plus [Ⓛ]		104		106	102
Sheriff CL Plus [Ⓛ]		104			102
Razor CL Plus [Ⓛ]				114	107
Sowing date	19 May	11 May	25 May	25 May	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

For more information click this [LINK](#)**TABLE 6 Morawa main season wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.12	3.28		2.37	0.57
Vixen ^{db}			Trial failed	118	145
LRPB Havoc ^{db}		111		114	118
Scepter ^{db}	108	107		109	116
Devil ^{db}				109	110
Mace ^{db}	102	106		107	115
RockStar ^{db}				106	95
Corack ^{db}	99	105		108	115
Emu Rock ^{db}	92	108		104	123
Ninja ^{db}	107	103		103	97
Hydra ^{db}	103	102		102	103
CLEARFIELD® PLUS					
Razor CL Plus ^{db}				112	125
Chief CL Plus ^{db}		98		101	95
Sheriff CL Plus ^{db}		99			92
Sowing date	18 May	5 May	17 May	25 May	7 Jun
Rainfall J–M (mm)	76	112	36	63	5
Rainfall A–O (mm)	67	285	125	246	186

For more information click this [LINK](#)**TABLE 7 Mullewa main season wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.46	2.52	3.32	2.62	0.53
Vixen ^{db}			90	122	157
LRPB Havoc ^{db}		114	94	119	107
RockStar ^{db}				103	89
Scepter ^{db}	106	108	103	108	118
Devil ^{db}			105	107	111
Ninja ^{db}	108	104	105	102	100
Kinsei ^{db}			109	98	75
LRPB Cobra ^{db}	112	98	98	106	82
Zen ^{db}	105	102	103	104	81
Mace ^{db}	99	107	97	107	113
CLEARFIELD® PLUS					
Razor CL Plus ^{db}			89	113	144
Chief CL Plus ^{db}		102	104	102	72
Sowing date	18 May	5 May	17 May	25 May	7 Jun
Rainfall J–M (mm)	198	36	184	99	3
Rainfall A–O (mm)	209	234	166	255	152

For more information click this [LINK](#)**TABLE 8 Nabawa main season wheat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.26	5.71	4.12	4.16	2.10
RockStar ^{db}				112	116
Kinsei ^{db}			109	103	111
Ninja ^{db}	114	108	107	105	108
Scepter ^{db}	109	106	105	112	111
Devil ^{db}			105	112	112
Zen ^{db}	104	105	104	104	107
Catapult ^{db}				103	104
Bremer ^{db}	106	101	107	102	104
Cutlass ^{db}	118	101	107	97	95
Hydra ^{db}	106	103	103	103	104
CLEARFIELD® PLUS					
Chief CL Plus ^{db}		104	108	106	105
Sheriff CL Plus ^{db}		105	104		103
Razor CL Plus ^{db}			89	105	103
Sowing date	18 May	6 May	19 May	25 May	7 Jun
Rainfall J–M (mm)	96	38	78	58	3
Rainfall A–O (mm)	241	78	227	363	305

For more information click this [LINK](#)

TABLE 9 Ogilvie main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.16	4.62	3.38	4.75	1.47
RockStar ^{db}				111	108
Scepter ^{db}	103	107	102	108	111
Devil ^{db}			102	110	113
Ninja ^{db}	108	105	106	105	102
Kinsei ^{db}			106	104	103
Cutlass ^{db}	112	97	110	105	92
Magenta ^{db}	114	98	111	102	85
Catapult ^{db}				103	104
Hydra ^{db}	103	103	103	101	102
Vixen ^{db}			88	108	119
CLEARFIELD® PLUS					
Sheriff CL Plus ^{db}		100	101		100
Chief CL Plus ^{db}		99	101	102	102
Razor CL Plus ^{db}			91	97	112
Sowing date	2 May	6 May	18 May	25 May	7 Jun
Rainfall J–M (mm)	112	42	108	70	7
Rainfall A–O (mm)	283	328	192	233	195

For more information click this [LINK](#)

TABLE 10 Yuna main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.85	3.09	1.83	3.73	0.94
RockStar ^{db}				106	118
Scepter ^{db}	102	113	110	111	115
Vixen ^{db}			109	124	108
LRPB Havoc ^{db}		108	114	120	101
Devil ^{db}			109	110	117
Ninja ^{db}	108	110	106	102	109
Hydra ^{db}	105	105	104	101	105
Kinsei ^{db}			106	99	112
Mace ^{db}	93	103	107	107	107
Zen ^{db}	94	104	107	104	105
CLEARFIELD® PLUS					
Chief CL Plus ^{db}		105	111	104	101
Razor CL Plus ^{db}			103	110	106
Sheriff CL Plus ^{db}		103			101
Sowing date	1 May	14 May	18 May	25 May	7 Jun
Rainfall J–M (mm)	79	23	77	64	7
Rainfall A–O (mm)	240	252	185	216	195

For more information click this [LINK](#)

TABLE 11 Ogilvie early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)			3.47	4.02	1.91
RockStar ^{db}	No trial	No trial			114
Cutlass ^{db}			109	110	112
Catapult ^{db}				106	115
Kinsei ^{db}			112	104	113
Forrest ^{db}				105	100
Longsword ^{db}			118	99	105
DS Pascal ^{db}			107	107	102
LRPB Nighthawk ^{db}				103	97
LRPB Trojan ^{db}			97	102	105
Magenta ^{db}			97	99	102
CLEARFIELD® PLUS					
Sheriff CL Plus ^{db}					105
Sowing date			20 Apr	20 Apr	17 Apr
Rainfall J–M (mm)			108	70	7
Rainfall A–O (mm)			192	233	195

For more information click this [LINK](#)

WHEAT VARIETY QUALITY – WESTERN AUSTRALIA

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 low grain screenings under a wider range of environments. The following figures show the grain quality trends as either histograms or box and whisker plots from

2018 and 2019 NVT averaged for all trials in Western Australia. Only the varieties evaluated at every site are included. Histograms are used where there were fewer than 10 sites of 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 represents 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 38 NVT sites in WA 2019.

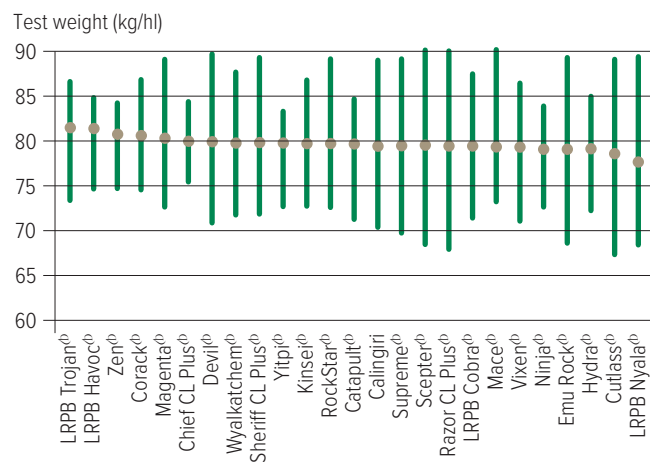


FIGURE 2 Test weight (kg/hl) comparisons for main season wheat varieties from 38 NVT sites in WA 2018.

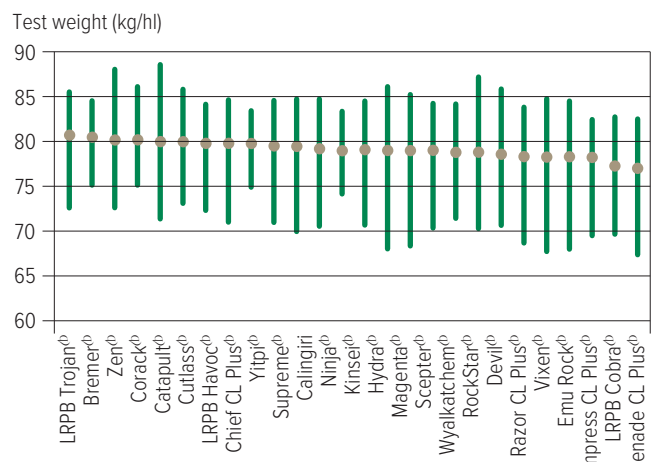


FIGURE 3 Test weight (kg/hl) comparisons for early season wheat varieties from six NVT sites in WA 2019.

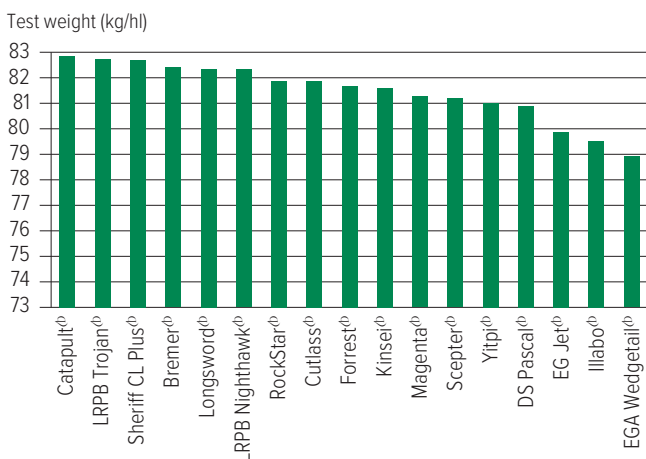


FIGURE 4 Test weight (kg/hl) comparisons for early season wheat varieties from four NVT sites in WA 2018.

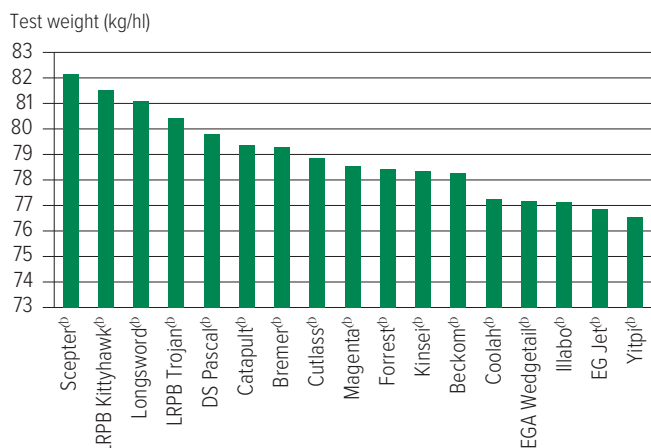


FIGURE 5 Screenings (<2.0mm) comparisons for main season wheat varieties from 38 NVT sites in WA 2019.

Screenings (% <2.0mm)

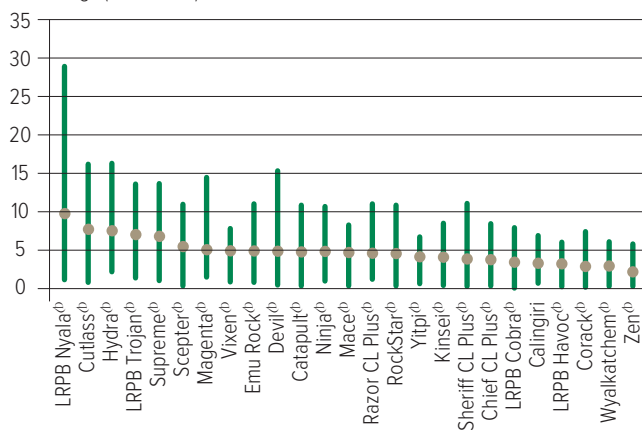


FIGURE 6 Screenings (<2.0mm) comparisons for main season wheat varieties from 38 NVT sites in WA 2018.

Screenings (% <2.0mm)

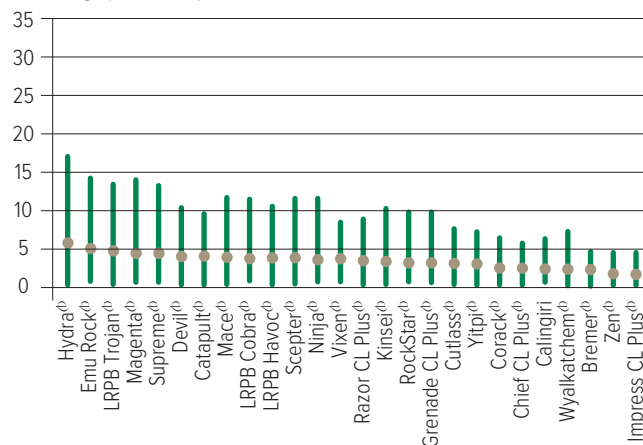


FIGURE 7 Screenings (<2.0mm) comparisons for early season wheat varieties from six NVT sites in WA 2019.

Screenings (% <2.0mm sieve)

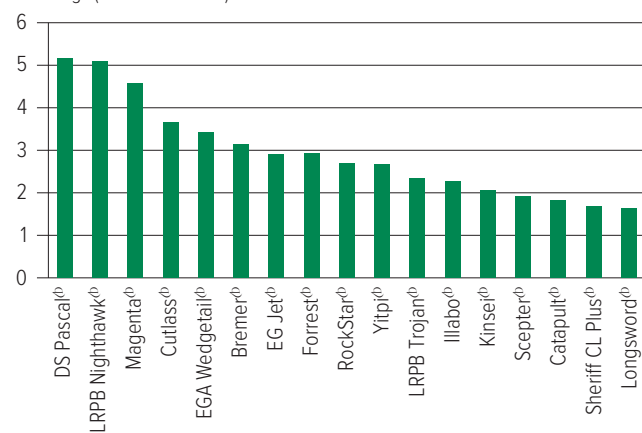
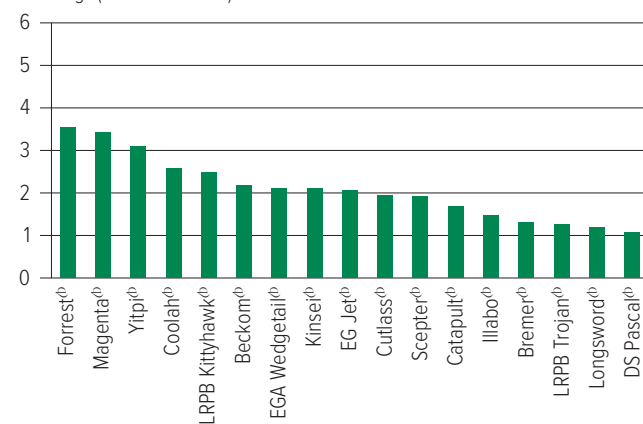


FIGURE 8 Screenings (<2.0mm) comparisons for early season wheat varieties from four NVT sites in WA 2018.

Screenings (% <2.0mm sieve)



WHEAT VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

The following table contains varietal ratings for the predominant diseases of wheat in Western Australia.

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

TABLE 12 Wheat disease guide for Western Australia.

Variety	Nodorum blotch (leaf)	Nodorum blotch (glume)	Septoria tritici blotch	Yellow spot	Stem rust	Stripe rust	Leaf rust	Powdery mildew	Flag smut	Common bunt	RLN resistance (<i>Pratylenchus quasitereoides</i>)	RLN resistance (<i>Pratylenchus neglectus</i>)	CCN	Crown rot
Bremer ^{db}			S	MSS	MR	MR	MR	S	MSS	RMR	MSSp	SVS	MRMS	S
Chief CL Plus ^{db}	MS	MRMS	S	MRMS	MR	S	MR	S	SVS	MSS/MR		MRMS	MS	MSS
Corack ^{db}			S	MRMS	MR	MS	SVS	SVS	S	MSS	MSS	MSS	RMR	S
Cutlass ^{db}			MSS	MSS	R	RMR	R	S	MSS	S		MSS	MR	S
Devil ^{db}	MS	MRMS	S	MRMS	MS	MR	SVS	SVS	SVS	MS/MR	MSp	S	MSS	MSS
DS Pascal ^{db}			MS	MRMS	MSS	RMR	MS	RMR	S	SVS		S	S	S
Emu Rock ^{db}			S	MRMS	MS	MRMS	SVS	S	MS/MR	SVS	MS	MSS	S	MSS
Grenade CL Plus ^{db}			S	S	MR	RMR	S	MSS	MR	SVS		MSS	R	S
Harper ^{db}			MSS	MSS	MS	RMR	S	MS	RMR	MSS		S	MRMS	S
Hydra ^{db}			MS	MRMS	MS	MS	SVS	S	VS	VS		S	S	S
Illabo ^{db}	MRMS	MR	MR	MS	MRMS	RMR	S	R	R	SVS/MS	MSp	S	MRMS	Sp
Impress CL Plus ^{db}			MSS	MRMS	MR	MSS	RMR	SVS	VS	MRMS#		MRMS	MS	S
Longsword ^{db}	MRMS	MR	MRMS	MRMS	MR	RMR	MSS	MSS	MRMS	RMR		MRMS	MRMS	MSS
LRPB Arrow ^{db}			S	MRMS	S	S	SVS	S	MS	RMR		MRMS	MS	MSS
LRPB Cobra ^{db}			MSS	MRMS	MR ^a	MSS	MR/S	MSS	S	SVS	MS	MSS	MS	S
LRPB Havoc ^{db}	MS	MS	MRMS	MRMS	S	MR	MSS	MSSp	MS	MSS/R		S	S	MSS
LRPB Nighthawk ^{db}	MS	MR	MRMS _p	MS	RMR	RMR	MSS	MSS	MSS	RMR		S	MS	MSSp
LRPB Nyala ^{db}	MS	MR	SVS	MRMS	SVS	RMR	S	R	MSS	VS		S	MSS	MSS
LRPB Trojan ^{db}			S	MSS	MRMS	MR	MR/MS	S	SVS	SVS		MSS	MS	MS
Mace ^{db}			S	MRMS	MRMS	RMR	MSS	MSS	S	MS/MR	MRMS	MS	MRMS	S
Ninja ^{db}			MS	MRMS	SVS	MS	S	S	MR	RMR		S	MS	S
Razor CL Plus ^{db}	MRMS	MRMS	SVS	MSS	MRMS	RMR	S	MSS	RMR	RMR		S	MR	S
RockStar ^{db}	MRMS	MR	MSS	MRMS	MR	RMR	S	MS	VS	MR		MRMS	MSS	Sp
Scepter ^{db}			S	MRMS	MRMS	MR	MSS	S	MSS	MSS	MS	S	MRMS	MSS
Supreme ^{db}			MSS	MS	MRMS	MR	RMR	MS	MSS	SVS		MSS	S	MSS
Tungsten ^{db}			MSS	MSS	MS	RMR	MS#	MS	MRMS	S		MSS	MS	S
Wyalkatchem ^{db}	MSS	MR	S	MR	MSS	S	S	SVS	SVS	MSS/MR	MSS	MRMS	S	S
Yitpi ^{db}			MRMS	SVS	S	MRMS	S	MS	MR	S	MS	MSS	MR	S
Zen ^{db}			S	MRMS	S	MRMS	S	S	MS	MR	MSp	MRMS	S	S

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, # may be more susceptible to new pathotypes, ^a 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 *Western Australian Crop Sowing Guide* was published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Leabrook [Ⓛ]	University of Adelaide	3.80	Mid-early maturing, medium-tall variety under malting evaluation. Bred for yield and grain size improvement over Compass [Ⓛ] .
Maximus CL [Ⓛ]	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, [Ⓛ] denotes Plant Breeder's Rights apply.

Refer to 2020 *Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide

WHEAT

BARLEY

CANOLA

CHICKPEA

FIELD PEA

LUPIN

BARLEY VARIETY YIELD PERFORMANCE – GERALDTON

The following tables contain yield results from the top-performing varieties within each NVT location in Geraldton 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 Eradu main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.56	2.25	4.91	
Fathom [Ⓛ]	No trial	117	118	111	Trial failed
Leabrook [Ⓛ]		114	115	109	
Rosalind [Ⓛ]		112	116	108	
Compass [Ⓛ]		111	113	105	
Commander [Ⓛ]		105	102	104	
RGT Planet [Ⓛ]		103	100	105	
Banks [Ⓛ]		103	105	102	
Lockyer [Ⓛ]			102	102	
La Trobe [Ⓛ]		103	106	100	
Mundah			106	99	
CLEARFIELD®					
Maximus CL [Ⓛ]				103	
Scope CL [Ⓛ]		105	106	102	
Spartacus CL [Ⓛ]		100	104	97	
Sowing date		14 May	18 May	25 May	7 Jun
Rainfall J–M (mm)		39	156	48	3
Rainfall A–O (mm)		233	159	318	270

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 Mingenew main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.78	5.87	1.89	3.67	1.18
Rosalind [Ⓛ]	126	104	111	120	130
Buff [Ⓛ]		107	117	112	134
Leabrook [Ⓛ]	106	103	103	119	130
Fathom [Ⓛ]	104	101	106	118	133
Compass [Ⓛ]	108	100	102	120	129
Litmus [Ⓛ]	124	99	116		120
La Trobe [Ⓛ]	108	100	101	112	114
Banks [Ⓛ]	109	102	103	107	110
RGT Planet [Ⓛ]		107	102	99	100
Mundah	107		104	106	110
CLEARFIELD®					
Maximus CL [Ⓛ]				115	120
Spartacus CL [Ⓛ]	111	98	100	112	111
Scope CL [Ⓛ]	101	97	103	105	110
Sowing date	19 May	11 May	25 May	25 May	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	369

For more information click this [LINK](#)

BARLEY VARIETY QUALITY – WESTERN AUSTRALIA

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 higher test weights, low grain screenings or high retentions under a wider range of environments. The following figures show the grain

quality trends as box and whisker plots from 2018 and 2019 NVT averaged for all trials in Western Australia. Only the varieties evaluated at every site are included. 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 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 barley varieties from 20 NVT sites in WA 2019.

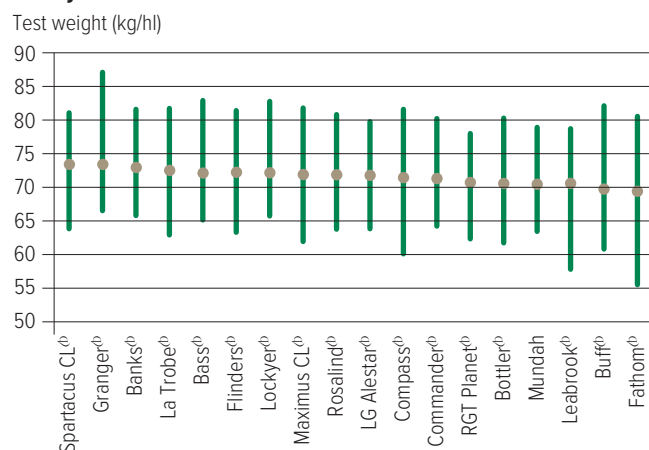


FIGURE 2 Test weight (kg/hl) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

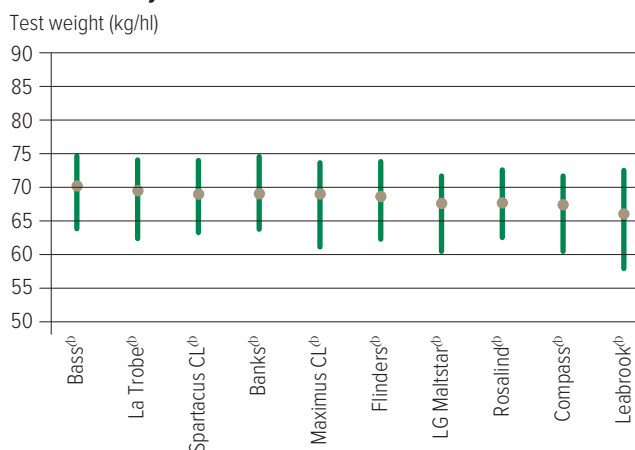


FIGURE 3 Screenings (<2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

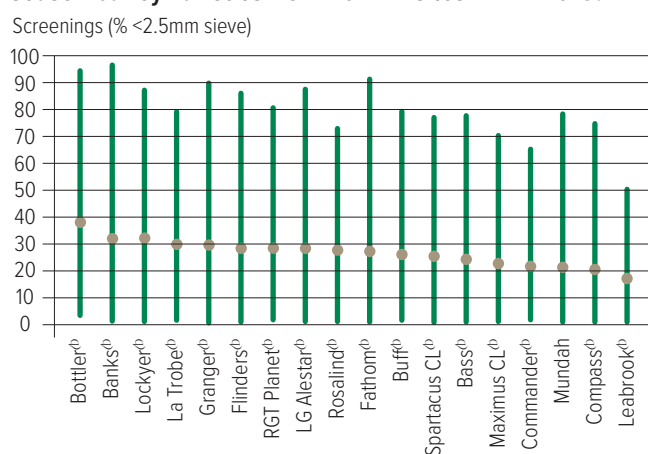


FIGURE 4 Screenings (<2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

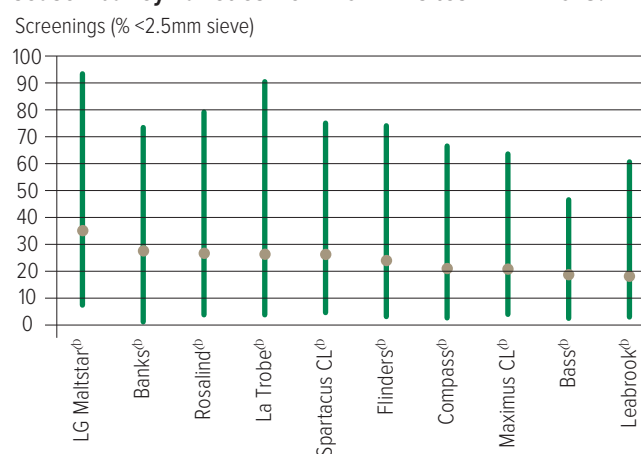


FIGURE 5 Retention (>2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

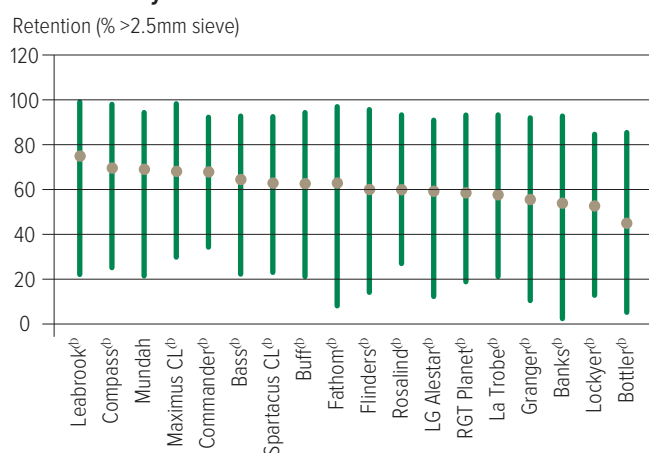
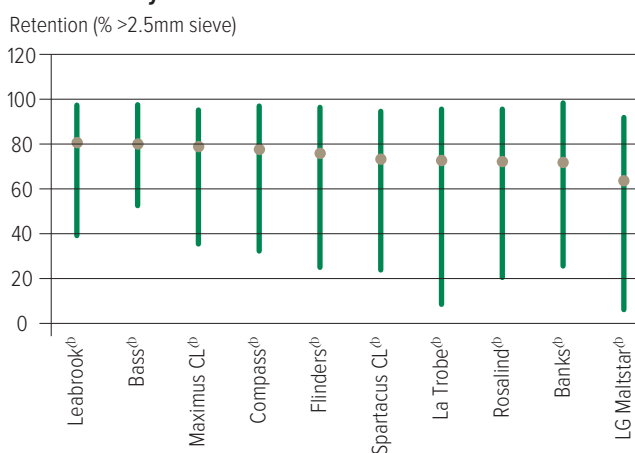


FIGURE 6 Retention (>2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2018.



BARLEY VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

The following table contains varietal ratings for the predominant diseases of barley in Western Australia.

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

TABLE 3 Barley disease guide for Western Australia.

Variety	Scald	Net type net blotch	Spot type net blotch	Powdery mildew	Leaf rust	Crown rot	Barley yellow dwarf virus	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus quasitereoides</i>)	CCN
LG Alestar ^{db}	S	MR-S	S	R	MS	S	MRMS-MS	MR		R ^a
Banks ^{db}	S	MRMS-MS	MSS	MR-MRMS	MSS	MSS	MRMS-MS	MRMS	MSS _p	S
Bass ^{db}	MS	MRMS-SVS	S	MSS	SVS	S	MRMS-MS	MS	MSS	S
Buff ^{db}	MSS	MRMS-S	S	SVS	MSS	S	MRMS	MRMS	MSS _p	
Compass ^{db}	S	MRMS-S	MSS	MRMS	S	S	MRMS-MS	MRMS	S	R
Fathom ^{db}	R-MR	MS-SVS	MR	MRMS	MRMS	S	MRMS	MRMS	MSS	R
Flinders ^{db}	S	MRMS-S	S	R	MRMS	SVS	MRMS	MRMS	MSS _p	S
Granger ^{db}	S	MR-MS	S	R	MRMS	SVS	MRMS	MRMS	MSS	R
La Trobe ^{db}	MR	MRMS-S	S	MS-S	MSS	SVS	MSS	MRMS	MSS	R
Leabrook ^{db}	MRMS-MS	RMR-S	MS	R-MRMS	MSS	S	MRMS-MSS	MR	MS _p	MRMS
Litmus ^{db}	SVS	MS-SVS	S	MR	S	MSS	S	MS	MSS _p	MS
Lockyer ^{db}	MRMS-MS	MR-S	S	MSS	MSS	Sp	MRMS	MR		
Maximus CL ^{db}	MR	MRMS-S	MS	RMR#	MSS	MSS _p	MRMS	MRMS	MSS _p	R
Mundah	SVS	MRMS-S	S	S	S	Sp	MSS	MS	MS _p	
Oxford	S	MR-VS	S	R#	MRMS	SVS	MR-MRMS	MR		S
RGT Planet ^{db}	MRMS	MRMS-S	S	R	MRMS	MSS	MR-MRMS	MRMS	MSS _p	R _p
Rosalind ^{db}	MS	MR-S	S	MRMS-MS	MR	MSS	MR-MRMS	MRMS		R
Scope CL ^{db}	MSS	MR-S	MSS	R	MSS	SVS	MRMS	MRMS	MS	S
Spartacus CL ^{db}	MR	MRMS-MSS	SVS	MR-MS	MSS	S	MS-S	MRMS	MSS _p	R

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, p = provisional rating, - hyphen indicates a range of reactions, # may be more susceptible to new pathotypes, ^ line contains a few susceptible off types.

CANOLA

NEW CANOLA VARIETIES

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

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
HyITec® Trident	Nuseed Pty Ltd	10.00	Early maturity hybrid canola with medium-tall plant height. Suited to low-medium rainfall areas.
InVigor® R 4022P	BASF Australia	n/a	Not supplied

n/a not available, * EPR amount is ex-GST, [♠] denotes Plant Breeder's Rights apply.

Refer to 2020 *Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide

WHEAT

BARLEY

CANOLA

CHICKPEA

FIELD PEA

LUPIN

CANOLA VARIETY YIELD PERFORMANCE – GERALDTON

The following tables contain yield results from the top-performing varieties within each NVT location in Geraldton 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 Mingenew early season CL canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.98	0.97	1.52	0.78
Pioneer® 43Y92 (CL)	Trial failed	104	127	106	120
Pioneer® 44Y90 (CL)		106	120	105	115
Saintly CL			125		116
VICTORY® V7002CL			101	112	106
Hyola® 575CL			96	95	95
Sowing date	7 May	24 Apr	2 May	25 May	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

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 Greenough early season RR canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.17	1.60		1.77
Pioneer® 43Y29 RR	Trial failed		100	Trial failed	103
Pioneer® 44Y27 (RR)		113	110		109
InVigor® R 4022P					107
Xseed™ Raptor					109
Hyola® 410XX					107
Hyola® 540XC					102
InVigor® R 3520		97	101		103
Pioneer® 43Y23 (RR)		92	104		103
Hyola® 404RR		88	102		99
Sowing date	18 May	24 Apr	1 May	25 May	7 Jun
Rainfall J–M (mm)	99	33	57	19	11
Rainfall A–O (mm)	221	402	258	274	379

For more information click this [LINK](#)

TABLE 3 Mingenew early season RR canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.98	0.97	1.52	0.78
Xseed™ Raptor	Trial failed				121
Pioneer® 44Y27 (RR)		108	115	108	113
Hyola® 410XX					117
InVigor® R 4022P					105
Pioneer® 43Y29 RR			117		105
Hyola® 540XC					104
Pioneer® 43Y23 (RR)		100	97	110	103
InVigor® R 3520		103	91	108	98
Hyola® 404RR		94	99	105	101
Sowing date	7 May	24 Apr	2 May	25 May	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

For more information click this [LINK](#)**TABLE 4 Greenough early season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.17	1.60		1.77
InVigor® T 4510	Trial failed	120	112	Trial failed	111
HyITec® Trophy			111		110
HyITec® Trident					118
InVigor® T 3510					107
Hyola® 550TT					114
Pioneer® 44T02 TT		106	109		108
Hyola® 350TT			112		110
SF Spark TT					103
ATR Bonito ^{db}		96	99		97
BASF 3000 TR		87	102		101
Sowing date	18 May	24 Apr	1 May	25 May	7 Jun
Rainfall J–M (mm)	99	33	57	19	11
Rainfall A–O (mm)	221	402	258	274	379

For more information click this [LINK](#)**TABLE 5 Mingenew early season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.98	0.97	1.52	0.78
HyITec® Trident	Trial failed		129	129	131
Hyola® 550TT					124
InVigor® T 4510		110	124	106	118
HyITec® Trophy			121	106	116
Hyola® 350TT			112	115	114
InVigor® T 3510				103	111
Pioneer® 44T02 TT		105	110	110	111
SF Spark TT					104
BASF 3000 TR		97	91	110	99
ATR Bonito ^{db}		95	104	95	100
Sowing date	7 May	24 Apr	2 May	25 May	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

For more information click this [LINK](#)

CANOLA VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

The following table contains varietal ratings for the predominant diseases of canola in Western Australia.

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

TABLE 6 Canola disease guide for Western Australia.

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
TRIAZINE-TOLERANT VARIETIES					
ATR Bonito ^{db}	MS	R-MR	R	R	Open pollinated
ATR Mako ^{db}	MR	R-MR	R	R	Open pollinated
ATR Stingray ^{db}	MR	R	R	R	Open pollinated
ATR Wahoo ^{db}	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
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
CLEARFIELD® AND TRIAZINE-TOLERANT VARIETIES					
Hyola® 580CT	R	R	R	R	Hybrid
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
ROUNDUP READY® AND TRIAZINE-TOLERANT VARIETIES					
BASF 3000 TR	MS-S	MR	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 6 Canola disease guide for Western Australia (continued).

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
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

CHICKPEA VARIETY YIELD PERFORMANCE – GERALDTON

The following tables contain yield results from the top-performing varieties within each NVT location in Geraldton 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 Mingenew desi chickpea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.06	1.35	0.55	1.44	0.89
Genesis™ 090	109	110	98	105	96
Neelam ^{db}	105	114	106	105	99
PBA Striker ^{db}	98	112	111	108	111
PBA Slasher ^{db}	101	106	100	101	100
PBA Maiden ^{db}	90	101	98	97	104
Genesis™ 836	91	90	91	95	95
Sowing date	13 May	15 May	19 May	4 Jun	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

For more information click this [LINK](#)

TABLE 3 Three Springs desi chickpea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.65	1.72	0.33	1.18	
Genesis™ 079	140	123	137	127	
Neelam ^{db}	131	106	106	107	
PBA Striker ^{db}	100	107	98	112	
PBA Slasher ^{db}	111	101	91	101	
Genesis™ 090	111	103	78	101	
Ambar ^{db}	100	97	95	106	
PBA Maiden ^{db}	96	97	97	102	
Genesis™ 836	79	93	95	95	
Sowing date	14 May	16 May	16 May	4 Jun	7 Jun
Rainfall J–M (mm)	47	68	149	85	9
Rainfall A–O (mm)	137	302	158	293	235

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).

Refer to *2020 Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide.

TABLE 2 Mullewa desi chickpea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.96	1.82	0.71	0.93	0.81
Neelam ^{db}	111	116	109	107	98
PBA Striker ^{db}	100	120	98	96	101
PBA Slasher ^{db}	102	108	96	103	102
PBA Maiden ^{db}	98	110	87	104	106
Genesis™ 090	100		102	97	92
Genesis™ 836	92	91	91	99	95
Sowing date	7 May	15 May	17 May	25 May	7 Jun
Rainfall J–M (mm)	198	36	184	99	3
Rainfall A–O (mm)	209	234	166	255	152

For more information click this [LINK](#)

CHICKPEA VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

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

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

TABLE 4 Chickpea disease guide for Western Australia.

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
DESI CHICKPEA						
Ambar [Ⓛ]	S		S	MRMS	MS	
Genesis™ 836	S	MS	S	MRMS _p	MS _p	
Neelam [Ⓛ]	S	S	S	MRMS	MS	MI
PBA Maiden [Ⓛ]	S	MS	S	MRMS	MRMS	IVI
PBA Slasher [Ⓛ]	S	MS	S	MRMS	MRMS	MTMI
PBA Striker [Ⓛ]	S	S	S	MRMS	MRMS	
KABULI CHICKPEA						
Genesis™ 090	MS	R/MR	S	MRMS	MS	MI

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.

FIELD PEA

FIELD PEA VARIETY YIELD PERFORMANCE – GERALDTON

The following tables contain yield results from the top-performing varieties within each NVT location in Geraldton 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 Mingenew field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.33	2.41	0.63	1.44	1.18
PBA Butler ^{db}	98	109	99	115	99
PBA Gunyah ^{db}	100	87	96	104	105
PBA Wharton ^{db}	106	90	97	88	101
PBA Pearl ^{db}	81	109	66	111	99
PBA Percy ^{db}	87	97	103	96	108
Kaspa ^{db}	97	78	94	107	105
PBA Twilight ^{db}	99	79	90	97	106
PBA Oura ^{db}	87	95	83	94	101
Sowing date	12 May	16 May	19 May	4 Jun	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

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).

Refer to *2020 Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide.

TABLE 2 Three Springs field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		1.56	0.57	1.51	
PBA Percy ^{db}	Trial failed	101	124	95	Trial failed
PBA Butler ^{db}		98	96	105	
PBA Pearl ^{db}		90	86	109	
PBA Oura ^{db}		89	97	99	
PBA Gunyah ^{db}		77	105	103	
PBA Twilight ^{db}		70	104	101	
Kaspa ^{db}		57	102	102	
Parafield		62	65	74	
Sowing date	14 May	16 May	16 May	4 Jun	7 Jun
Rainfall J–M (mm)	47	68	149	85	9
Rainfall A–O (mm)	137	302	158	293	235

For more information click this [LINK](#)

FIELD PEA VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

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

Western Australia. These ratings are updated annually by crop pathologists and were released in March 2020. Selected varieties of most relevance to Western Australian 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 Western Australia.

Variety	Common diseases				Diseases rarely found	
	Blackspot (<i>Ascochyta</i> blight)	Downy mildew	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus thornei</i>)	Powdery mildew	Bacterial blight
Kaspa [Ⓛ]	MS	S	MR	MRMS	S	S
PBA Butler [Ⓛ]	MS	S	MR	MRMS	S	MS
PBA Gunyah [Ⓛ]	MS	S	MR	MRMS	S	S
PBA Oura [Ⓛ]	MS	S	MR	MRMS	S	MS
PBA Pearl [Ⓛ]	MS	S	MR	MRMS	S	MS
PBA Percy [Ⓛ]	MS	S	MR	RMR	S	MRMS
PBA Twilight [Ⓛ]	MS	S	MR	MRMS	S	S
PBA Wharton [Ⓛ]	MS	S	MR	MRMS	R	S
Sturt	MS	S	MR	MR	S	S

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

LUPIN

NEW LUPIN VARIETIES

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

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

* EPR amount is ex-GST, ^{db} denotes Plant Breeder's Rights apply.

Refer to 2020 *Western Australian Crop Sowing Guide* for further information at grdc.com.au/NVT-WA-Sowing-Guide

WHEAT

BARLEY

CANOLA

CHICKPEA

FIELD PEA

LUPIN

LUPIN VARIETY YIELD PERFORMANCE – GERALDTON

The following tables contain yield results from the top-performing varieties within each NVT location in Geraldton 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 Binnu narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.18			3.21	
PBA Jurien ^{db}	113	Trial failed	Trial failed		No trial
PBA Barlock ^{db}	107				
Mandelup ^{db}	105				
Coyote ^{db}	106			109	
PBA Bateman ^{db}	97			100	
PBA Gunyidi ^{db}	96				
PBA Leeman ^{db}	99			94	
Coromup ^{db}	97			91	
Jenabillup ^{db}	84			94	
Sowing date	14 Apr	14 May	20 Apr	25 May	
Rainfall J–M (mm)	n/a	42	107	70	
Rainfall A–O (mm)	n/a	328	185	233	

n/a = Not available

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 Eneabba narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.42	1.07	2.91	0.90
PBA Jurien ^{db}	No trial	141	121		109
PBA Barlock ^{db}		126	109		92
Mandelup ^{db}		106	104		96
Coyote ^{db}		91	117	103	123
PBA Gunyidi ^{db}		100	113		110
Coromup ^{db}		108	101	92	104
PBA Bateman ^{db}		87		96	121
PBA Leeman ^{db}		96		97	100
Wonga					63
Sowing date		16 May	1 May	25 May	7 Jun
Rainfall J–M (mm)		49	47	63	12
Rainfall A–O (mm)		417	272	409	273

For more information click this [LINK](#)

TABLE 3 Mingenew narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.96	1.95	2.41	0.37
PBA Jurien ^{db}	Trial failed	120	98		91
Coyote ^{db}		108	111	109	115
PBA Barlock ^{db}		115	96		71
Mandelup ^{db}		109	102		77
PBA Bateman ^{db}		99		104	130
PBA Gunyidi ^{db}		99	98		120
PBA Leeman ^{db}		96		95	105
Wonga					46
Coromup ^{db}		94	94	93	123
Sowing date	20 Apr	11 May	21 Apr	25 May	7 Jun
Rainfall J–M (mm)	26	30	122	75	12
Rainfall A–O (mm)	133	427	172	338	370

For more information click this [LINK](#)

TABLE 4 Mullewa narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.57	1.90	1.95	0.73
PBA Jurien ^{db}	Trial failed	119	102		120
PBA Barlock ^{db}		115	98		106
Coyote ^{db}		92	111	111	110
Mandelup ^{db}		104	100		101
PBA Bateman ^{db}		88		106	108
PBA Gunyidi ^{db}		96	104		106
Coromup ^{db}		102	99	91	104
Wonga					79
PBA Leeman ^{db}		98		96	98
Sowing date	15 Apr	15 May	21 Apr	25 May	7 Jun
Rainfall J–M (mm)	198	36	184	99	3
Rainfall A–O (mm)	209	234	166	255	152

For more information click this [LINK](#)

TABLE 5 Walkaway narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.13	2.33		1.98	1.69
PBA Jurien ^{db}	103	139	Trial failed		109
PBA Barlock ^{db}	102	126			99
Coyote ^{db}	107	109		109	107
Mandelup ^{db}	103	111			96
PBA Bateman ^{db}	104	102		103	110
PBA Gunyidi ^{db}	101	106			108
Coromup ^{db}	97	99		94	107
PBA Leeman ^{db}	99	93		95	99
Wonga					82
Sowing date	5 May	13 May	21 Apr	25 May	7 Jun
Rainfall J–M (mm)	n/a	47	57	48	12
Rainfall A–O (mm)	n/a	482	59	318	273

n/a = Not available

For more information click this [LINK](#)

TABLE 6 Yuna narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)					1.00
PBA Jurien ^{db}	No trial	No trial	No trial	No trial	115
Coyote ^{db}					113
PBA Bateman ^{db}					106
PBA Barlock ^{db}					102
PBA Gunyidi ^{db}					102
Coromup ^{db}					101
Mandelup ^{db}					100
PBA Leeman ^{db}					100
Wonga					76
Sowing date					7 Jun
Rainfall J–M (mm)					7
Rainfall A–O (mm)					195

For more information click this [LINK](#)

LUPIN VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

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

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

TABLE 7 Lupin disease guide for Western Australia.

Variety	Brown leaf spot	Phomopsis stem infection	Anthracnose resistance
Coyote [Ⓛ]	MS _p	MR _p	MRMS _p
Jenabillup [Ⓛ]	MRMS	MS	MS
Mandelup [Ⓛ]	MS	RMR	MR
PBA Barlock [Ⓛ]	MS	MR	RMR
PBA Bateman [Ⓛ]	MS	RMR	MRMS
PBA Gunyidi [Ⓛ]	MS	RMR	MR
PBA Jurien [Ⓛ]	MS	RMR	RMR

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

USEFUL LINKS AND FURTHER INFORMATION

NVT Harvest Reports for all regions

grdc.com.au/harvestreports

Variety Central

varietycentral.com.au

NVT Overview Podcast (1 November 2018)

grdc.com.au/news-and-media/audio/podcast/nvt-overview

NVT Overview Video (29 October 2019)

youtu.be/ThGjxFXR_ug

NVT Western Region (29 October 2019)

youtu.be/B2q5nJGvx80

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

youtu.be/GbasB-xUIQA

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

youtu.be/eS4UbszsEAg