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NVT HARVEST REPORT



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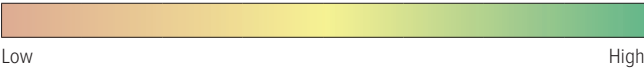
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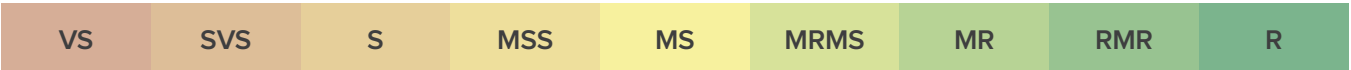
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LEGEND: MEAN VARIETY YIELD PERFORMANCE



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 Esperance. 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 Esperance 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

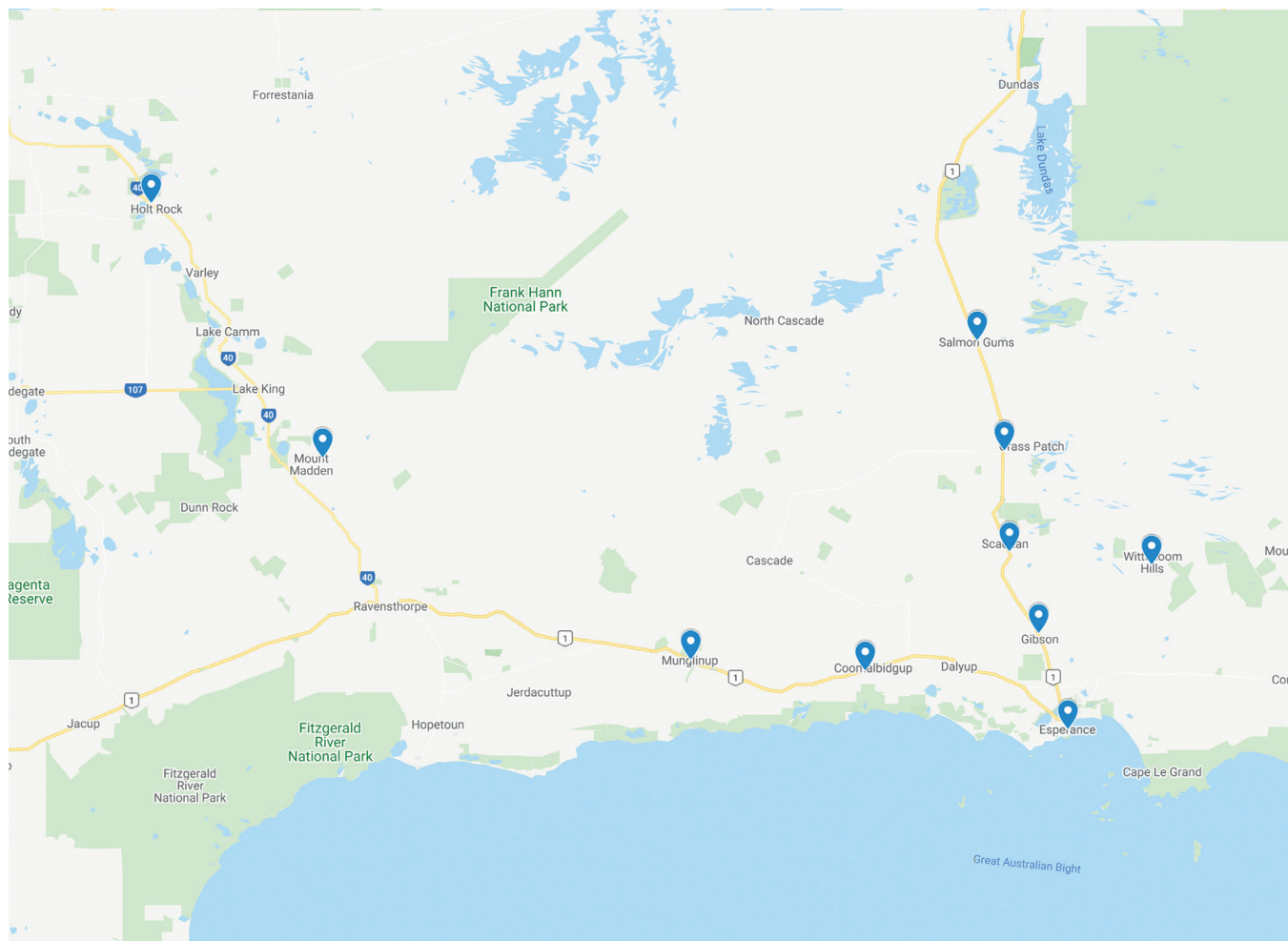
A factor analytic (FA) mixed model approach is used in the multi-environment trial (MET) analysis conducted by GRDC, supported by the Statistics for the Australian Grains Industry (SAGI) program. This approach generates long-term MET values for varieties at an individual trial level.

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 Esperance 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 Esperance.

NVT SITE LOCATIONS – ESPERANCE 2015–2019

FIGURE 1 Location of NVT trial sites in Esperance 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 ^ϕ	Australian Grain Technologies	3.25	Longer season than Scepter ^ϕ , with a mid-late maturity allowing growers to achieve Scepter ^ϕ -like yields when sown in late April. Catapult ^ϕ has a very flexible sowing window with wide adaptation and is viewed as a great alternative to Trojan ^ϕ , Magenta ^ϕ , Cutlass ^ϕ and Yitpi ^ϕ . Catapult ^ϕ offers a unique combination of features to growers with Australian Hard quality (WA/SA/VIC/southern NSW).
EG Jet ^ϕ	Elders/Seedmark	n/a	Not supplied
LRPB Nyala ^ϕ	LongReach Plant Breeders Pty Ltd	3.75	Soft biscuit wheat for Western Australia.
RockStar ^ϕ	InterGrain	3.50	High-yielding, mid-late flowering variety with a similar time to flowering as LRPB Trojan ^ϕ and Magenta ^ϕ . 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 ^ϕ 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 ^ϕ . RockStar ^ϕ is an excellent varietal alternative to LRPB Trojan ^ϕ , Magenta ^ϕ , Yitpi ^ϕ and Cutlass ^ϕ .

n/a not available, * EPR amount is ex-GST, ^ϕ 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

OAT

CANOLA

FIELD PEA

LUPIN

WHEAT VARIETY YIELD PERFORMANCE – ESPERANCE

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.65		4.16	4.00	4.28
RockStar ^{db}		Trial failed		113	117
Scepter ^{db}	113		111	107	111
Devil ^{db}			110	107	111
Ninja ^{db}			107	108	108
Vixen ^{db}				98	103
Kinsei ^{db}			104	107	110
LRPB Havoc ^{db}			101	99	107
Hydra ^{db}	105		103	103	104
Catapult ^{db}				104	105
Zen ^{db}	100		100	102	106
CLEARFIELD® PLUS					
Chief CL Plus ^{db}			99	102	108
Sheriff CL Plus ^{db}			101		104
Razor CL Plus ^{db}			100	96	99
Sowing date	3 May	1 May	13 May	15 May	8 May
Rainfall J–M (mm)	50	105	253	151	20
Rainfall A–O (mm)	359	364	321	417	352

For more information click this [LINK](#)

TABLE 3 Munglinup main season wheat

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.23	3.46		3.50	
RockStar ^{db}			Trial failed	111	Trial failed
Devil ^{db}				112	
Scepter ^{db}	117	106		112	
Ninja ^{db}		106		105	
Cutlass ^{db}	112	108		101	
Vixen ^{db}				115	
Catapult ^{db}				103	
Kinsei ^{db}				102	
Magenta ^{db}	107	107		98	
Hydra ^{db}	105	102		102	
CLEARFIELD® PLUS					
Chief CL Plus ^{db}		93		103	
Razor CL Plus ^{db}				102	
Grenade CL Plus ^{db}	78	96		88	
Sowing date	1 May	11 May	16 May	10 Jun	9 May
Rainfall J–M (mm)	70	170	264	130	21
Rainfall A–O (mm)	359	449	307	331	292

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 Mt Madden main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.62		2.78	1.20	1.16
Vixen ^{db}		Trial failed	115	132	152
Devil ^{db}			121	114	121
Scepter ^{db}	113		118	116	123
LRPB Havoc ^{db}			111	108	119
RockStar ^{db}				104	103
Corack ^{db}	114		110	111	124
Mace ^{db}	108		104	110	119
Catapult ^{db}				106	110
Ninja ^{db}	105		110	102	98
Zen ^{db}	109		106	94	92
CLEARFIELD® PLUS					
Razor CL Plus ^{db}			96	116	122
Chief CL Plus ^{db}			108	95	99
Sheriff CL Plus ^{db}			106		93
Sowing date	13 May	6 May	18 May	4 Jun	28 May
Rainfall J–M (mm)	64	204	172	56	14
Rainfall A–O (mm)	271	241	192	158	142

For more information click this [LINK](#)

TABLE 4 Salmon Gums main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.87	2.10	2.83	2.62	
Vixen ^{db}			118	122	Trial failed
Scepter ^{db}	111	115	118	114	
Devil ^{db}			115	112	
RockStar ^{db}				109	
Ninja ^{db}	105	111	110	105	
LRPB Havoc ^{db}		95	101	112	
Catapult ^{db}				103	
Cutlass ^{db}	97	111	113	100	
Corack ^{db}	108	101	100	107	
Hydra ^{db}	102	103	106	103	
CLEARFIELD® PLUS					
Razor CL Plus ^{db}			102	108	
Chief CL Plus ^{db}		92	97	102	
Grenade CL Plus ^{db}	89	87	85	89	
Sowing date	2 May	4 May	15 May	7 Jun	30 May
Rainfall J–M (mm)	48	99	218	17	28
Rainfall A–O (mm)	263	214	212	176	159

For more information click this [LINK](#)

TABLE 5 Scaddan main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.41	3.94	3.41	3.69	
Vixen ^{db}			120	116	Trial failed
Scepter ^{db}	117	107	112	113	
RockStar ^{db}				113	
Devil ^{db}			110	112	
Ninja ^{db}	109	106	105	106	
LRPB Havoc ^{db}		100	103	113	
Cutlass ^{db}	105	104	107	100	
Catapult ^{db}				102	
Hydra ^{db}	105	103	103	102	
Corack ^{db}	103	98	102	107	
CLEARFIELD® PLUS					
Razor CL Plus ^{db}			106	102	
Chief CL Plus ^{db}		99	93	105	
Impress CL Plus ^{db}		85	84	99	
Sowing date	2 May	3 May	17 May	8 Jun	10 May
Rainfall J–M (mm)	70	180	253	141	16
Rainfall A–O (mm)	327	308	299	213	278

For more information click this [LINK](#)

TABLE 6 Gibson early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				3.10	3.25
Longsword ^{db}	No trial	No trial	No trial	123	122
Kinsei ^{db}				117	125
Scepter ^{db}				107	130
Catapult ^{db}				114	123
RockStar ^{db}					110
Cutlass ^{db}				116	107
Bremer ^{db}				99	118
Illabo ^{db}				119	94
LRPB Trojan ^{db}				103	107
Magenta ^{db}				101	106
CLEARFIELD® PLUS					
Sheriff CL Plus ^{db}					107
Sowing date				2 May	17 Apr
Rainfall J–M (mm)				151	20
Rainfall A–O (mm)				417	352

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.

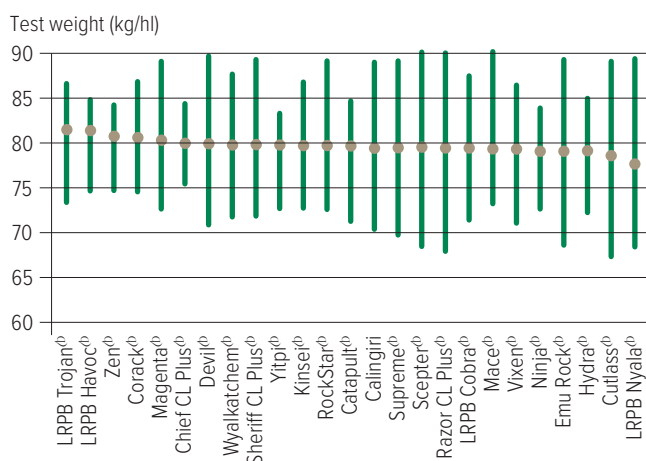


FIGURE 2 Test weight (kg/hl) comparisons for main season wheat varieties from 38 NVT sites in WA 2018.

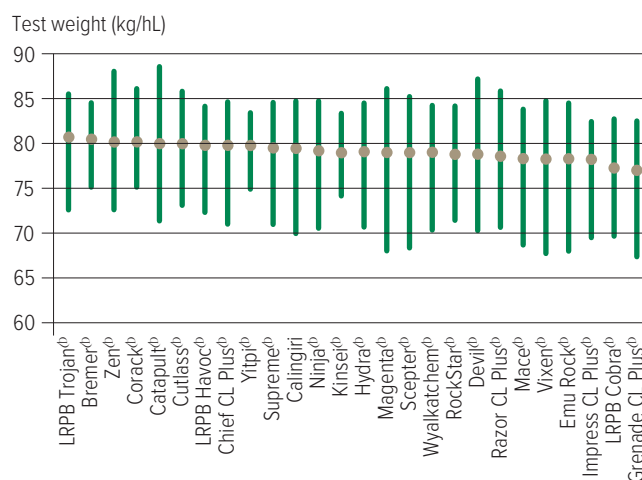


FIGURE 3 Test weight (kg/hl) comparisons for early season wheat varieties from six NVT sites in WA 2019.

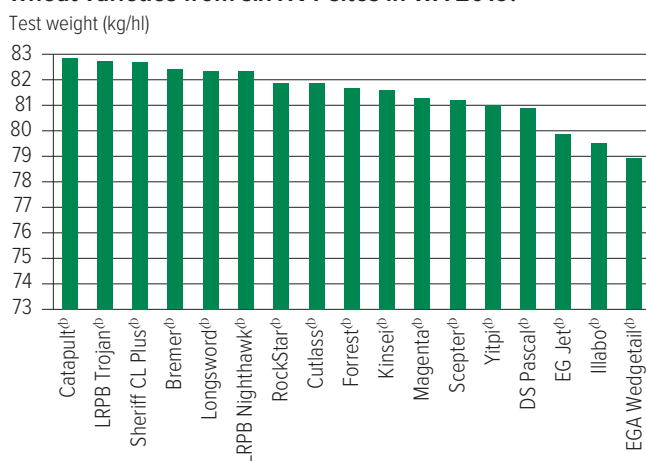


FIGURE 4 Test weight (kg/hl) comparisons for early season wheat varieties from four NVT sites in WA 2018.

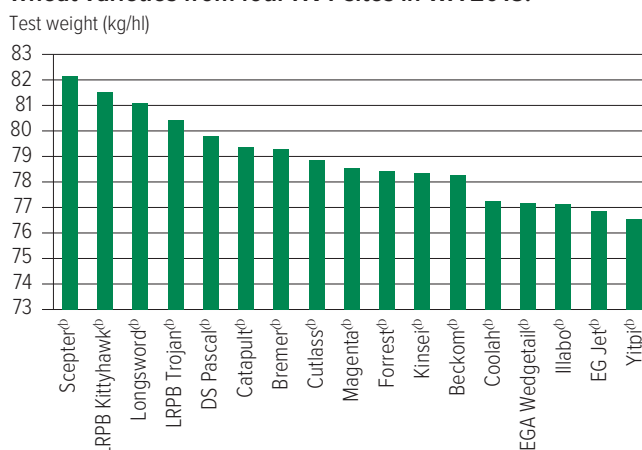


FIGURE 5 Screenings (<2.0mm) comparisons for main season wheat varieties from 38 NVT sites in WA 2019.

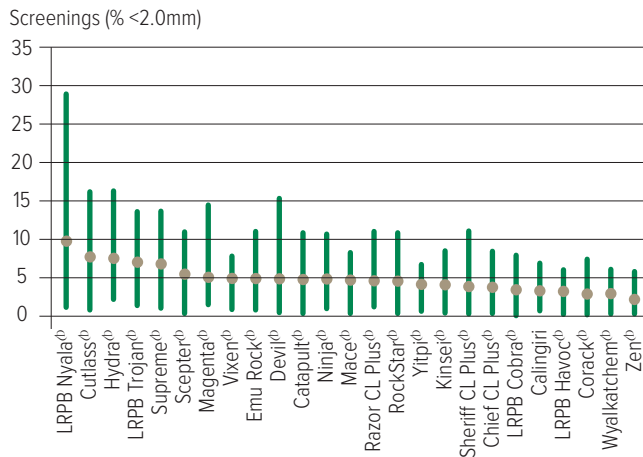


FIGURE 6 Screenings (<2.0mm) comparisons for main season wheat varieties from 38 NVT sites in WA 2018.

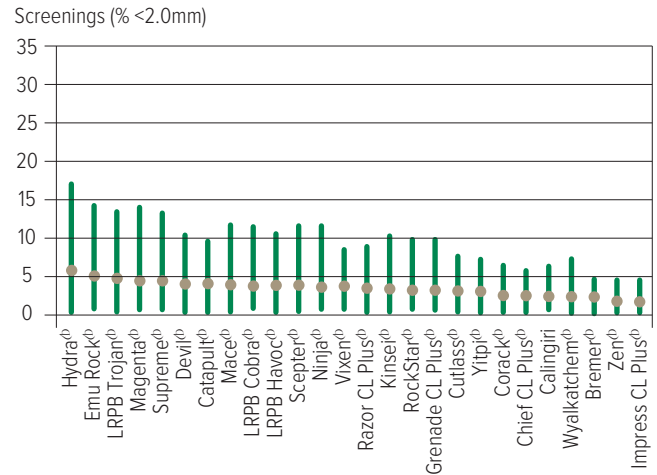


FIGURE 7 Screenings (<2.0mm) comparisons for early season wheat varieties from six NVT sites in WA 2019.

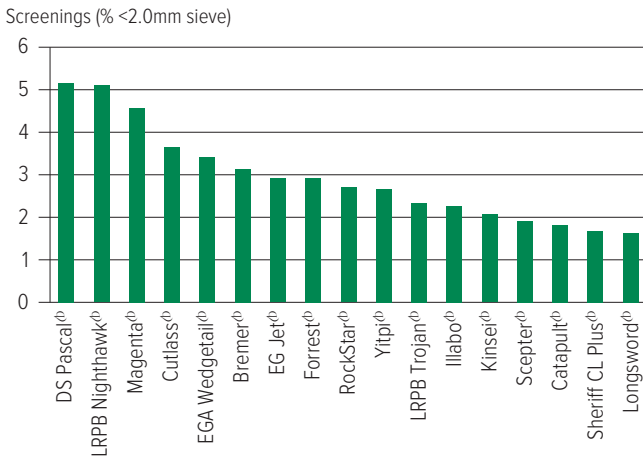
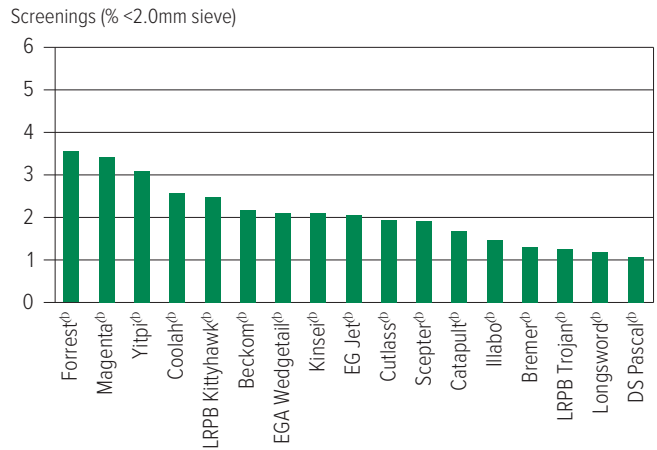


FIGURE 8 Screenings (<2.0mm) comparisons for early season wheat varieties from four NVT sites in WA 2018.



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 Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

TABLE 7 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	MSS _p	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	MS _p	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	MS _p	S	MRMS	S _p
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 [^]	MSS	MR/S	MSS	S	SVS	MS	MSS	MS	S
LRPB Havoc ^{db}	MS	MS	MRMS	MRMS	S	MR	MSS	MSS _p	MS	MSS/R		S	S	MSS
LRPB Nighthawk ^{db}	MS	MR	MRMS _p	MS	RMR	RMR	MSS	MSS	MSS	RMR		S	MS	MSS _p
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	S _p
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	MS _p	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,

[^] 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

OAT

CANOLA

FIELD PEA

LUPIN

BARLEY VARIETY YIELD PERFORMANCE – ESPERANCE

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				5.33	5.19
RGT Planet ^{db}				116	114
Buff ^{db}				109	108
Bottler ^{db}				108	105
Granger ^{db}				107	105
Rosalind ^{db}				100	108
LG Alestar ^{db}	No trial	No trial	No trial		101
Oxford				105	100
Banks ^{db}				101	103
Leabrook ^{db}				99	104
Lockyer ^{db}				101	101
CLEARFIELD®					
Maximus CL ^{db}				97	104
Spartacus CL ^{db}				91	99
Sowing date				15 May	8 May
Rainfall J–M (mm)				151	20
Rainfall A–O (mm)				417	352

For more information click this [LINK](#)

TABLE 3 Munglinup main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.88	3.66		4.43	
RGT Planet ^{db}		132		108	
LG Maltstar ^{db}	111	111		100	
Granger ^{db}	109	110		102	
Bottler ^{db}		110		101	
Oxford	110	107		99	
Buff ^{db}			Trial failed	104	Trial failed
Leabrook ^{db}	99	107		105	
Rosalind ^{db}	99	104		107	
Banks ^{db}	101	102		103	
Lockyer ^{db}	100	104		101	
CLEARFIELD®					
Maximus CL ^{db}				105	
Spartacus CL ^{db}	96	86		102	
Sowing date	1 May	11 May	16 May	10 Jun	9 May
Rainfall J–M (mm)	70	170	264	130	21
Rainfall A–O (mm)	359	449	307	331	292

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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 Mt Madden main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				1.35	1.18
Rosalind ^{db}				123	146
Mundah				103	147
Buff ^{db}				105	130
La Trobe ^{db}				111	120
Compass ^{db}	No trial	No trial	No trial	110	121
Banks ^{db}				109	115
Fathom ^{db}				99	116
Leabrook ^{db}				107	97
Bottler ^{db}				100	104
Flinders ^{db}				101	96
CLEARFIELD®					
Maximus CL ^{db}				118	135
Spartacus CL ^{db}				116	133
Sowing date				4 Jun	28 May
Rainfall J–M (mm)				56	14
Rainfall A–O (mm)				158	160

For more information click this [LINK](#)

TABLE 4 Scaddan main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.33		3.75	4.14	
RGT Planet ^{db}			115	109	
Oxford	115		108	100	
LG Maltstar ^{db}	111		105	101	
Leabrook ^{db}	100		108	106	
Granger ^{db}	107		104	102	
Flinders ^{db}	106	Trial failed	101	100	Trial failed
Commander ^{db}	103		105	98	
La Trobe ^{db}	99		102	103	
Lockyer ^{db}	101		102	101	
Banks ^{db}	99		101	103	
Clearfield®					
Maximus CL ^{db}				105	
Spartacus CL ^{db}	98		100	103	
Sowing date	2 May	3 May	17 May	9 Jun	10 May
Rainfall J–M (mm)	70	180	253	141	16
Rainfall A–O (mm)	327	308	299	213	278

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.

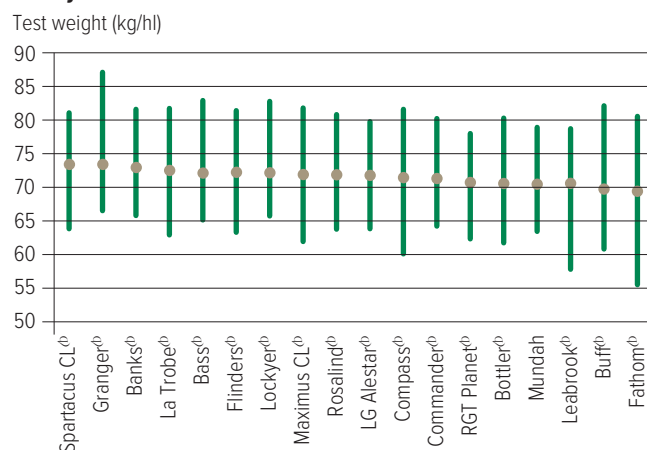


FIGURE 2 Test weight (kg/hl) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

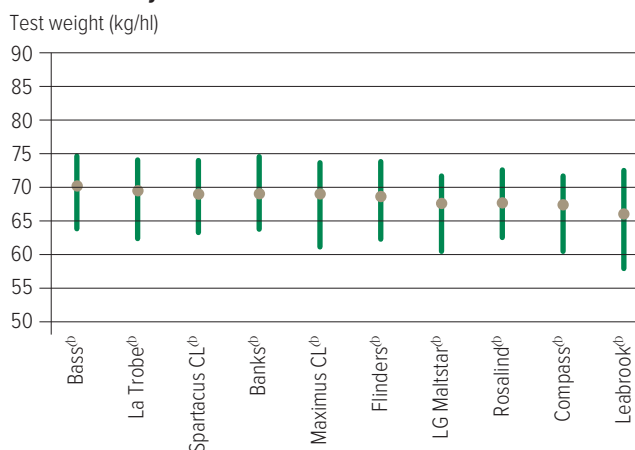


FIGURE 3 Screenings (<2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

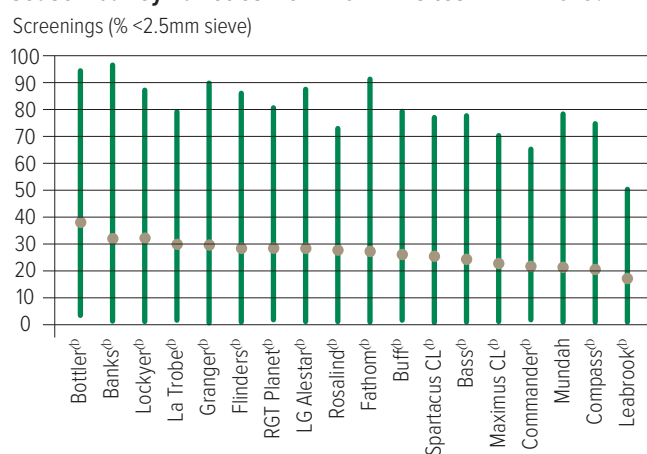


FIGURE 4 Screenings (<2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

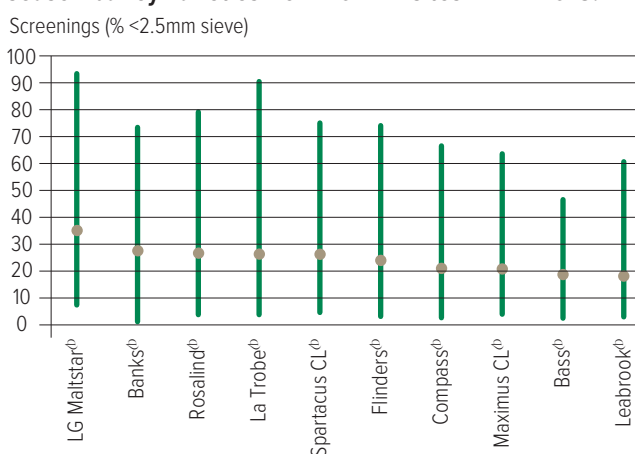


FIGURE 5 Retention (>2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

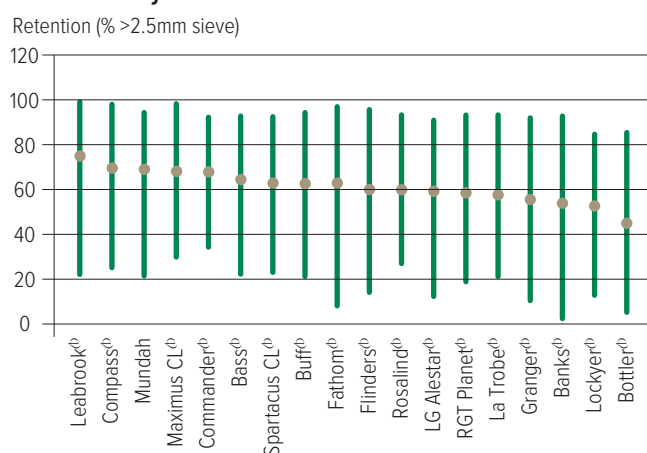
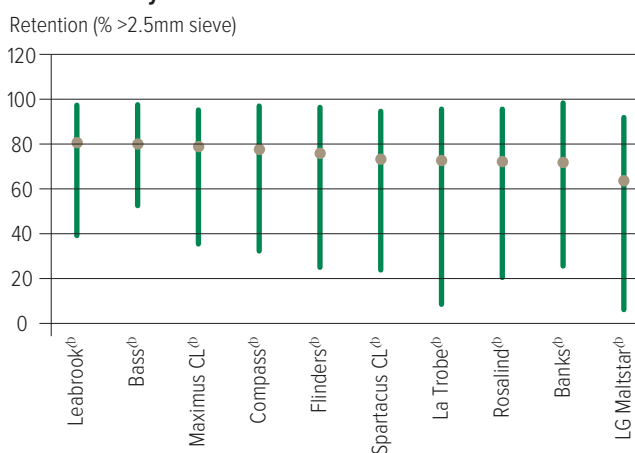


FIGURE 6 Retention (>2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2018.



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 5 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	MSSp	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	MSSp	
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	MSSp	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	MSp	MRMS
Litmus ^{db}	SVS	MS-SVS	S	MR	S	MSS	S	MS	MSSp	MS
Lockyer ^{db}	MRMS-MS	MR-S	S	MSS	MSS	Sp	MRMS	MR		
Maximus CL ^{db}	MR	MRMS-S	MS	RMR#	MSS	MSSp	MRMS	MRMS	MSSp	R
Mundah	SVS	MRMS-S	S	S	S	Sp	MSS	MS	MSp	
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	MSSp	Rp
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	MSSp	R

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant,

MI = moderately intolerant, I = intolerant, VI = very intolerant, p = provisional rating, - hyphen indicates a range of reactions, # may be more susceptible to new pathotypes,

^a 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 *Western Australian Crop Sowing Guide* was published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Bilby ^{db}	National Oat Breeding Program	2.50	High grain yield potentials and high β -glucan content with bright plump grain and high groat per cent leading to higher milling yield for processing.
Koorabup ^{db}	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, ^{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

OAT

CANOLA

FIELD PEA

LUPIN

OAT VARIETY YIELD PERFORMANCE – ESPERANCE

The following tables contain yield results from the top-performing varieties within each NVT location in Esperance 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 Esperance oat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.73		3.56	4.82	
Bannister ^{db}	130	No trial	120	128	No trial
Williams ^{db}	105		113	124	
Bilby ^{db}	127		109	107	
Wandering ^{db}	112		101	120	
Kojonup ^{db}	106		115	111	
Kowari ^{db}	118		103	95	
Mitika ^{db}	114		102	91	
Carrolup	85		100	104	
Koorabup ^{db}	64		89	102	
Durack ^{db}	83		88	83	
Sowing date	14 May		13 May	14 May	
Rainfall J–M (mm)	43		199	85	
Rainfall A–O (mm)	414		410	434	

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 Holt Rock oat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.54		3.66	3.05	0.81
Wandering ^{db}	119	No trial	123	116	103
Bannister ^{db}	107		133	116	79
Bilby ^{db}	107		120	110	118
Williams ^{db}	103		122	116	84
Kowari ^{db}	102		108	102	126
Mitika ^{db}	97		101	97	118
Durack ^{db}	96		87	97	135
Carrolup	89		100	98	92
Yallara ^{db}	99		85	98	108
Koorabup ^{db}	94		90	98	95
Sowing date	12 May		18 May	2 Jun	22 May
Rainfall J–M (mm)	41		150	90	13
Rainfall A–O (mm)	175		188	160	143

For more information click this [LINK](#)

OAT VARIETY DISEASE RATINGS – WESTERN AUSTRALIA

The following table contains varietal ratings for the predominant diseases of oat 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 Oat disease guide for Western Australia.

Variety	Septoria blotch	Leaf rust	Stem rust	Barley yellow dwarf virus (BYDV)	Bacterial blight
Bannister ^{db}	MSS	R	MRMS	MRMS	S
Bilby ^{db}	SVS	MR	SVS	MRMS _p	S
Carrolup	MSS	VS	S	MSS _p	MSS
Durack ^{db}	S	MR	SVS	MSS	S
Kojonup ^{db}	S	SVS	MS	MS _p	SVS
Koorabup ^{db}	MRMS-SVSp	MRMS	MS	MSS _p	MSS
Kowari ^{db}	S	R	S	MSS	MSS
Mitika ^{db}	SVS	MR	S	S	MSS _p
Wandering ^{db}	S	VS	SVS	MS _p	MS _p
Williams ^{db}	MS	MR	MSS	MRMS	MSS
Yallara ^{db}	MR-Sp	R	MS	MSS	MSS

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, _p = 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 Western Australian Crop Sowing Guide was 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.
HyTTec® Trident	Nuseed Pty Ltd	10.00	Early maturity hybrid canola with medium-tall plant height. Suited to low-medium rainfall areas.
HyTTec® 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, [Ⓢ] 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

OAT

CANOLA

FIELD PEA

LUPIN

CANOLA VARIETY YIELD PERFORMANCE – ESPERANCE

The following tables contain yield results from the top-performing varieties within each NVT location in Esperance 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 Munglinup mid season CL canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.00	1.84	1.69	1.51	1.84
Pioneer® 45Y93 CL			122	108	102
Saintly CL	106			117	105
Banker CL	106		121	105	100
Pioneer® 45Y91 CL		103	112	102	99
VICTORY® V75-03CL					97
Hyola® 575CL	91	90	91		94
Sowing date	30 Apr	30 Apr	27 Apr	19 May	29 Apr
Rainfall J–M (mm)	70	203	264	130	21
Rainfall A–O (mm)	359	452	307	331	292

For more information click this [LINK](#)

TABLE 2 Gibson mid season RR canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.73		3.04	2.52	3.10
Xseed™ Raptor		Trial failed			106
Nuseed® GT-53	113		101	107	105
Pioneer® 45Y25 RR	113		104	104	104
InVigor® R 4022P					105
Hyola® 410XX					103
InVigor® R 5520P			101	103	101
Hyola® 506RR			99	102	101
Hyola® 540XC					97
VICTORY® V5003RR			99	90	96
Sowing date	30 Apr	30 Apr	10 May	2 May	3 May
Rainfall J–M (mm)	50	105	253	151	20
Rainfall A–O (mm)	359	364	321	417	352

For more information click this [LINK](#)

TABLE 3 Munglinup mid season RR canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.00	1.84	1.69		1.84
InVigor® R 4022P				Trial failed	102
Xseed™ Raptor					108
Nuseed® GT-53	108	113	94		107
Pioneer® 45Y25 RR	107	109	107		99
Hyola® 410XX					106
InVigor® R 5520P		97	115		99
Hyola® 506RR		101	98		103
Hyola® 540XC					96
VICTORY® V5003RR	93	95	86		94
Sowing date	1 May	5 May	28 Apr	29 Apr	9 May
Rainfall J–M (mm)	70	203	264	130	21
Rainfall A–O (mm)	359	452	307	331	292

For more information click this [LINK](#)

TABLE 4 Gibson mid season TT canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.73		1.58	2.52	3.10
HyITec® Trifecta		Listed varieties not tested Trial failed		126	114
HyITec® Trident					113
HyITec® Trophy			104	120	111
InVigor® T 4510			108	118	109
SF Ignite TT			106	109	107
DG 670TT			107	110	106
Hyola® 550TT				112	105
Hyola® 350TT				111	105
Hyola® 530XT					101
Pioneer® 45T03 TT				100	100
Sowing date	30 Apr	30 Apr	12 May	1 May	3 May
Rainfall J–M (mm)	50	105	253	151	20
Rainfall A–O (mm)	359	364	321	417	352

For more information click this [LINK](#)

TABLE 5 Munglinup mid season TT canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.00	1.84	1.69	1.51	1.84
HyTTec® Trifecta	Listed varieties not tested			127	114
HyTTec® Trident					119
HyTTec® Trophy					113
InVigor® T 4510		114	123	120	110
Hyola® 550TT				117	110
DG 670TT		110	119	106	102
Hyola® 350TT			111	116	108
SF Ignite TT		113	116	102	101
Hyola® 530XT					101
Pioneer® 45T03 TT				99	98
Sowing date	30 Apr	30 Apr	27 Apr	19 May	29 Apr
Rainfall J–M (mm)	70	203	264	130	21
Rainfall A–O (mm)	359	452	307	331	292

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.93	1.42	1.37	1.36	0.84
HyTTec® Trident			121		127
HyTTec® Trophy			115	114	118
InVigor® T 4510		107	110	112	109
Hyola® 550TT					108
Hyola® 350TT			105	111	104
DG 670TT		105		102	105
SF Ignite TT		105	108		109
ATR Bonito ^{db}	98	97	95	95	94
ATR Stingray ^{db}	102			91	85
ATR Flathead					79
Sowing date	1 May	2 May	14 May	20 May	7 May
Rainfall J–M (mm)	70	180	253	141	16
Rainfall A–O (mm)	327	308	299	213	278

For more information click this [LINK](#)**TABLE 7 Mt Madden early season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.70	1.95	1.75		1.26
HyTTec® Trident				Trial failed	122
InVigor® T 4510		104	115		121
Hyola® 550TT					117
HyTTec® Trophy			113		119
InVigor® T 3510					114
Hyola® 350TT			105		109
Pioneer® 44T02 TT	104	104	106		108
SF Spark TT					102
ATR Bonito ^{db}	98	100	99		103
ATR Stingray ^{db}	95				91
Sowing date	27 Apr	29 Apr	9 May	3 May	30 Apr
Rainfall J–M (mm)	64	204	172	56	14
Rainfall A–O (mm)	271	244	192	158	142

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 8 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 8 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.

FIELD PEA

FIELD PEA VARIETY YIELD PERFORMANCE – ESPERANCE

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.43	2.00	1.78	0.29
PBA Wharton ^{db}	Trial failed	95	99	114	107
PBA Butler ^{db}		105	104	88	97
PBA Gunyah ^{db}		100	93	93	102
PBA Twilight ^{db}		96	89	95	106
PBA Percy ^{db}		102	84	95	104
PBA Oura ^{db}		95	89	87	110
PBA Pearl ^{db}		97	93	71	119
Kaspa ^{db}		100	89	83	96
Sturt ^{db}		95			102
Parafield			74		78
Sowing date	21 May	27 May	6 Jun	8 Jun	14 Jun
Rainfall J–M (mm)	37	99	218	17	28
Rainfall A–O (mm)	272	214	212	176	159

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 Holt Rock field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.47		1.00	0.54	0.75
PBA Butler ^{db}	105	No trial	106	116	101
PBA Gunyah ^{db}	98		86	102	96
PBA Wharton ^{db}	96		83	96	107
Kaspa ^{db}	98		84	109	92
PBA Pearl ^{db}	94		98	43	107
PBA Twilight ^{db}	94		78	88	98
PBA Oura ^{db}	91		98	47	95
PBA Percy ^{db}	90		114	36	71
Sowing date	13 May		8 Jun	3 Jun	23 May
Rainfall J–M (mm)	n/a		150	90	13
Rainfall A–O (mm)	n/a		188	160	143

n/a = Not available

For more information click this [LINK](#)

TABLE 3 Salmon Gums field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)			1.19		0.36
PBA Butler [Ⓛ]	No trial	No trial	113	Trial failed	108
PBA Pearl [Ⓛ]			97		146
PBA Percy [Ⓛ]			99		120
Parafield					99
PBA Oura [Ⓛ]			90		120
Kaspa [Ⓛ]			99		86
PBA Gunyah [Ⓛ]			95		93
PBA Twilight [Ⓛ]			85		91
PBA Wharton [Ⓛ]			83		90
Excell					91
Sowing date			27 May	21 May	15 Jun
Rainfall J–M (mm)			218	17	28
Rainfall A–O (mm)			212	176	159

For more information click this [LINK](#)

TABLE 4 Scaddan field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.75	1.59	1.54	1.75	1.47
PBA Butler [Ⓛ]	114	116	106	89	105
PBA Pearl [Ⓛ]	120	84	96	76	104
PBA Percy [Ⓛ]	103	103	97	104	107
Sturt [Ⓛ]	112	88			106
PBA Gunyah [Ⓛ]	94	106	96	95	95
PBA Oura [Ⓛ]	100	84	92	91	98
Kaspa [Ⓛ]	91	115	93	85	92
Morgan [Ⓛ]					100
PBA Wharton [Ⓛ]	84	81	94	110	92
PBA Twilight [Ⓛ]	85	94	90	95	90
Sowing date	20 May	27 May	6 Jun	19 Jun	4 Jun
Rainfall J–M (mm)	70	180	253	141	16
Rainfall A–O (mm)	327	308	299	213	278

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 5 Field pea disease guide for Western Australia.

Variety	Common diseases				Diseases rarely found	
	Blackspot (Ascochyta blight)	Downy mildew	RLN resistance (Pratylenchus neglectus)	RLN resistance (Pratylenchus thornei)	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 [Ⓛ]	National Lupin Initiative	3.00	A very widely adapted variety with a maturity similar to Jurien [Ⓛ] offering high and stable yields in all lupin growing areas, particularly WA.

* 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

OAT

CANOLA

FIELD PEA

LUPIN

LUPIN VARIETY YIELD PERFORMANCE – ESPERANCE

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)			1.85	1.13	1.98
Coyote ^{db}	Trial failed	No trial	126	189	119
PBA Bateman ^{db}				198	97
PBA Jurien ^{db}			106		114
PBA Gunyidi ^{db}			111		89
Mandelup ^{db}			106		114
PBA Barlock ^{db}			101		109
PBA Leeman ^{db}					98
Coromup ^{db}			92	110	83
Wonga					92
Sowing date	14 May		12 May	14 May	2 May
Rainfall J–M (mm)	43		199	85	15
Rainfall A–O (mm)	414		410	434	369

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 Holt Rock narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.06			1.68	1.22
PBA Jurien ^{db}	101	No trial	Trial failed		106
PBA Bateman ^{db}	108			146	100
PBA Gunyidi ^{db}	102				99
Coyote ^{db}	112			129	104
Coromup ^{db}	94			129	99
PBA Barlock ^{db}	100				102
Mandelup ^{db}	104				102
PBA Leeman ^{db}	99				100
Wonga					94
Sowing date	13 May		28 Apr	4 May	1 May
Rainfall J–M (mm)	41		150	90	13
Rainfall A–O (mm)	175		188	160	143

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 3 Lupin disease guide for Western Australia.

Variety	Brown leaf spot	Phomopsis stem infection	Anthraxnose resistance
Coyote ^{db}	MS _p	MR _p	MRMS _p
Jenabillup ^{db}	MRMS	MS	MS
Mandelup ^{db}	MS	RMR	MR
PBA Barlock ^{db}	MS	MR	RMR
PBA Bateman ^{db}	MS	RMR	MRMS
PBA Gunyidi ^{db}	MS	RMR	MR
PBA Jurien ^{db}	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