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NVT HARVEST REPORT



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KWINANA WEST

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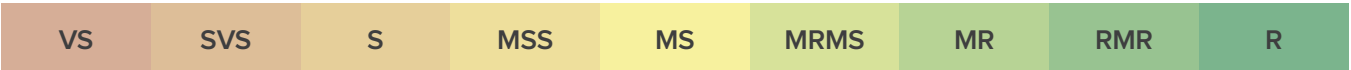
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LEGEND: MEAN VARIETY YIELD PERFORMANCE



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 Kwinana West. 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 Kwinana West 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

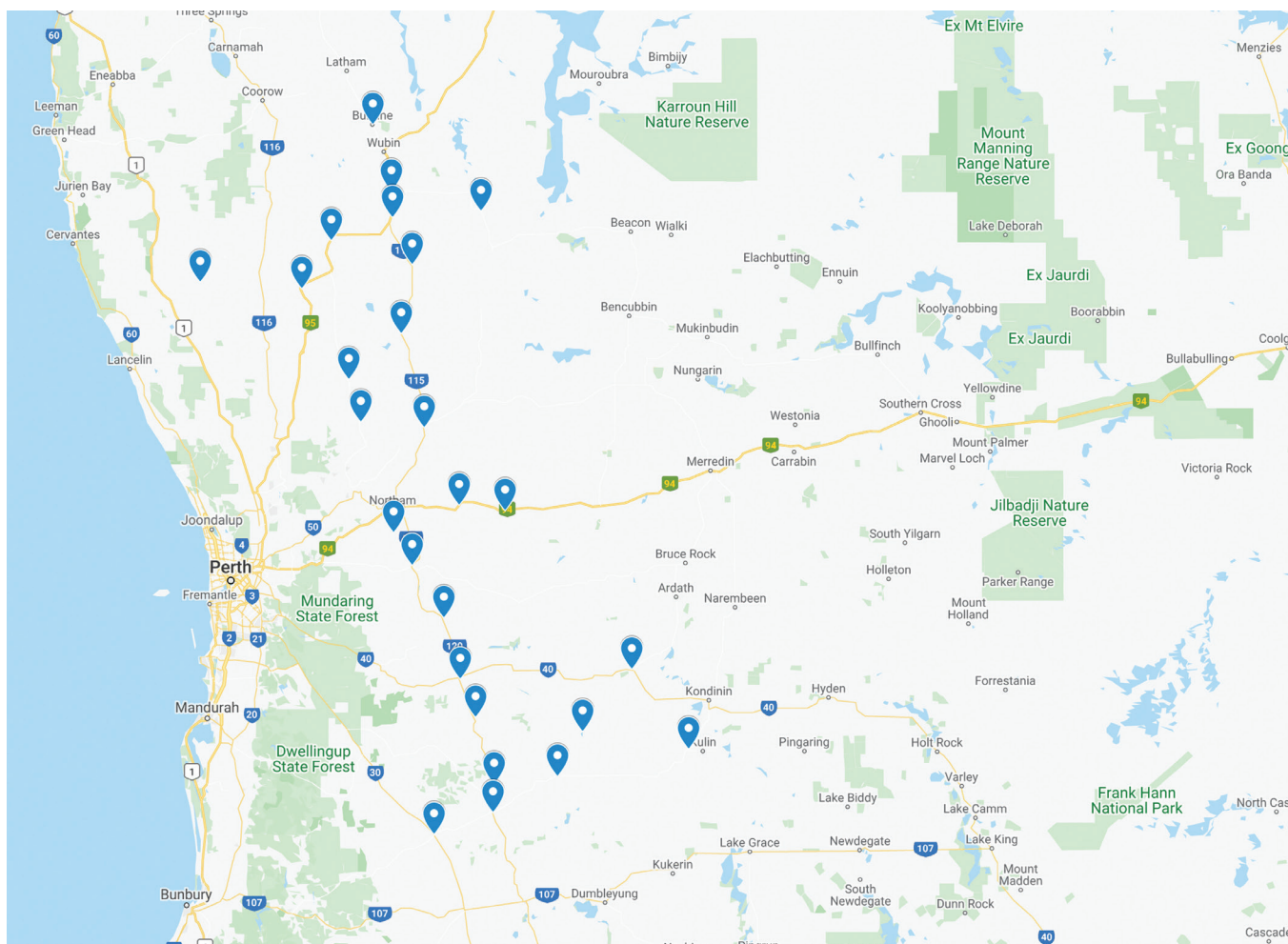
A factor analytic (FA) mixed model approach is used in the multi-environment trial (MET) analysis conducted by GRDC, supported by the Statistics for the Australian Grains Industry (SAGI) program. This approach generates long-term MET values for varieties at an individual trial level.

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 Kwinana West 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 Kwinana West.

NVT SITE LOCATIONS – KWINANA WEST 2015–2019

FIGURE 1 Location of NVT trial sites in Kwinana West 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

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

WHEAT VARIETY YIELD PERFORMANCE – KWINANA WEST

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.47	2.93	2.77	4.12	0.63
RockStar ^{db}				115	107
Devil ^{db}			111	115	115
Scepter ^{db}	112	111	111	111	118
Kinsei ^{db}			112	109	91
Ninja ^{db}	109	109	109	106	104
Vixen ^{db}			97	109	132
Catapult ^{db}				107	108
LRPB Havoc ^{db}		104	105	105	109
Zen ^{db}	102	103	107	106	93
Cutlass ^{db}	106	102	105	103	102
CLEARFIELD PLUS®					
Chief CL Plus ^{db}		101	111	104	97
Sheriff CL Plus ^{db}		103	106		95
Razor CL Plus ^{db}			91	99	115
Sowing date	25 May	16 May	11 May	25 May	7 Jun
Rainfall J–M (mm)	55	108	165	55	6
Rainfall A–O (mm)	214	216	140	341	235

For more information click this [LINK](#)

TABLE 3 Bolgart main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)			3.66		3.13
Vixen ^{db}	Trial failed	Trial failed	112	Trial failed	113
Devil ^{db}			107		110
Scepter ^{db}			108		108
LRPB Havoc ^{db}			110		105
Mace ^{db}			107		106
Corack ^{db}			104		109
RockStar ^{db}					105
Ninja ^{db}			104		101
Zen ^{db}			103		102
Kinsei ^{db}			102		102
CLEARFIELD PLUS®					
Razor CL Plus ^{db}			109		107
Chief CL Plus ^{db}			104		99
Sheriff CL Plus ^{db}			100		99
Sowing date	19 May	23 May	26 May	25 May	7 Jun
Rainfall J–M (mm)	64	170	172	99	0
Rainfall A–O (mm)	247	364	260	349	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 Beverley main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.92	4.72	4.75	4.83	2.96
Vixen ^{db}			119	116	113
Devil ^{db}			111	111	108
Scepter ^{db}	111	110	110	109	107
RockStar ^{db}				108	105
LRPB Havoc ^{db}		101	113	112	109
Ninja ^{db}	111	107	104	103	102
Corack ^{db}	94	100	109	110	109
Mace ^{db}	99	103	107	106	106
Kinsei ^{db}			102	104	102
Zen ^{db}	101	100	104	105	104
CLEARFIELD PLUS®					
Razor CL Plus ^{db}			110	107	108
Sheriff CL Plus ^{db}		98	101		101
Chief CL Plus ^{db}		93	102	103	101
Sowing date	12 May	24 May	2 Jun	30 May	7 Jun
Rainfall J–M (mm)	32	140	238	100	3
Rainfall A–O (mm)	234	313	246	237	282

For more information click this [LINK](#)

TABLE 4 Buntine main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.67	3.10	1.05	4.74	1.30
RockStar ^{db}				111	111
Devil ^{db}			109	112	119
Scepter ^{db}	109	108	108	110	122
Vixen ^{db}			103	112	135
Ninja ^{db}	105	110	105	105	105
Kinsei ^{db}			104	106	93
Catapult ^{db}				104	111
LRPB Havoc ^{db}		95	95	107	111
Mace ^{db}	105	97	102	105	114
Corack ^{db}	107	93	100	107	111
CLEARFIELD PLUS®					
Razor CL Plus ^{db}			101	104	117
Chief CL Plus ^{db}		99	98	102	99
Sheriff CL Plus ^{db}		102	99		95
Sowing date	23 May	10 May	15 May	25 May	7 Jun
Rainfall J–M (mm)	115	144	118	74	9
Rainfall A–O (mm)	264	186	156	254	173

For more information click this [LINK](#)

TABLE 5 Corrigin main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.77		3.83	4.16	2.15
RockStar ^{db}		Trial failed		118	107
Devil ^{db}			112	116	111
Vixen ^{db}			116	107	115
Scepter ^{db}	116		111	113	109
LRPB Havoc ^{db}			109	104	109
Corack ^{db}	107		107	105	110
Ninja ^{db}	110		105	108	102
Kinsei			102	111	102
Mace ^{db}	104		106	104	107
Catapult ^{db}					108
CLEARFIELD PLUS®					
Chief CL Plus ^{db}			102	104	103
Razor CL Plus ^{db}			106	101	106
Sheriff CL Plus ^{db}			101		101
Sowing date	18 May	25 May	1 Jun	25 May	7 Jun
Rainfall J–M (mm)	33	118	210	96	29
Rainfall A–O (mm)	194	249	229	230	228

For more information click this [LINK](#)

TABLE 7 Dandaragan main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.14	4.07	4.40	4.02	5.16
RockStar ^{db}				113	112
Devil ^{db}			110	112	113
Scepter ^{db}	105	107	110	108	109
Kinsei ^{db}			106	110	108
Ninja ^{db}	110	108	106	104	103
Catapult ^{db}				106	106
Zen ^{db}	97	98	105	106	106
Vixen ^{db}			109	103	107
Cutlass ^{db}	104	107	96	104	102
LRPB Havoc ^{db}		93	110	104	106
CLEARFIELD PLUS [®]					
Chief CL Plus ^{db}		94	106	106	106
Sheriff CL Plus ^{db}		100	103		103
Razor CL Plus ^{db}			103	95	99
Sowing date	18 May	9 May	24 May	11 Jun	7 Jun
Rainfall J–M (mm)	61	73	88	25	10
Rainfall A–O (mm)	299	572	334	248	241

For more information click this [LINK](#)

TABLE 6 Cunderdin main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.79	3.64	3.78	4.74	1.89
RockStar ^{db}				115	108
Devil ^{db}			111	114	114
Scepter ^{db}	114	111	111	112	113
Vixen ^{db}			110	108	124
Ninja ^{db}	112	109	106	108	102
Kinsei ^{db}			105	108	100
Catapult ^{db}				107	104
LRPB Havoc ^{db}		97	108	101	113
Zen ^{db}	106	102	104	103	102
Hydra ^{db}	106	103	103	103	102
CLEARFIELD PLUS [®]					
Sheriff CL Plus ^{db}		101	102		99
Chief CL Plus ^{db}		97	104	100	102
Razor CL Plus ^{db}			102	101	111
Sowing date	24 May	23 May	26 May	31 May	7 Jun
Rainfall J–M (mm)	29	137	188	25	6
Rainfall A–O (mm)	188	258	181	248	199

For more information click this [LINK](#)

TABLE 8 Goomalling main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.14		4.52	3.17	2.84
Vixen ^{db}		Trial failed	111	118	123
LRPB Havoc ^{db}			109	117	115
Corack ^{db}	99		105	116	112
Devil ^{db}			106	112	109
Scepter ^{db}	110		106	107	110
Mace ^{db}	104		105	109	111
RockStar ^{db}				106	103
Zen ^{db}	102		103	110	101
Ninja ^{db}	108		103	101	100
Hydra ^{db}	105		102	102	99
CLEARFIELD PLUS®					
Razor CL Plus ^{db}			107	111	115
Chief CL Plus ^{db}			103	104	103
Sheriff CL Plus ^{db}			101		98
Sowing date	20 May	23 May	6 May	5 Jun	7 Jun
Rainfall J–M (mm)	79	204	172	99	10
Rainfall A–O (mm)	210	262	218	349	250

For more information click this [LINK](#)

TABLE 9 Kulin main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.80		3.96		1.72
Vixen [®]		Trial failed	117	Trial failed	129
LRPB Havoc [®]			111		123
Scepter [®]	112		112		114
Devil [®]			111		116
RockStar [®]					109
Corack [®]	103		108		120
Mace [®]	104		107		111
Ninja [®]	106		104		101
Zen [®]	100		103		107
Hydra [®]	103		102		100
CLEARFIELD PLUS [®]					
Razor CL Plus [®]			107		109
Chief CL Plus [®]			103		107
Sheriff CL Plus [®]			101		103
Sowing date	20 May	10 May	1 Jun	27 May	7 Jun
Rainfall J–M (mm)	82	127	191	98	5
Rainfall A–O (mm)	187	197	248	160	171

For more information click this [LINK](#)

TABLE 10 Miling main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.62		4.39	4.36	1.38
Vixen [®]		Trial failed	112	111	130
LRPB Havoc [®]			108	109	117
Devil [®]			106	110	108
Scepter [®]	109		107	107	110
RockStar [®]				108	99
Corack [®]	97		105	110	112
Mace [®]	100		106	105	113
Ninja [®]	108		103	102	99
Zen [®]	101		102	106	99
Kinsei [®]			101	105	92
CLEARFIELD PLUS [®]					
Razor CL Plus [®]			109	104	121
Chief CL Plus [®]			101	104	99
Sheriff CL Plus [®]			100		96
Sowing date	18 May	16 May	2 Jun	26 May	7 Jun
Rainfall J–M (mm)	75	111	135	70	8
Rainfall A–O (mm)	250	324	240	356	270

For more information click this [LINK](#)

TABLE 11 Narrogin main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.40			2.62	3.68
Vixen [®]		Trial failed	Trial failed	106	115
LRPB Havoc [®]				102	109
Corack [®]	119			105	110
Devil [®]				110	111
Scepter [®]	111			108	110
RockStar [®]				110	108
Mace [®]	111			102	107
Zen [®]	107			103	104
Kinsei [®]				105	104
Ninja [®]	100			104	103
CLEARFIELD PLUS [®]					
Razor CL Plus [®]				99	107
Chief CL Plus [®]				102	102
Sheriff CL Plus [®]					101
Sowing date	12 Jun	26 May	5 Jun	11 Jun	7 Jun
Rainfall J–M (mm)	31	119	206	99	13
Rainfall A–O (mm)	218	317	370	402	324

For more information click this [LINK](#)

TABLE 12 Pithara main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.33	3.47		1.39
RockStar [Ⓢ]	Trial failed			No trial	111
Scepter [Ⓢ]		112	108		122
Vixen [Ⓢ]			99		134
Devil [Ⓢ]			110		119
Ninja [Ⓢ]		106	106		105
Catapult [Ⓢ]					111
LRPB Havoc [Ⓢ]		102	106		110
Corack [Ⓢ]		102	103		112
Mace [Ⓢ]		102	102		114
Hydra [Ⓢ]		103	102		
CLEARFIELD PLUS [Ⓢ]					
Razor CL Plus [Ⓢ]			92		116
Chief CL Plus [Ⓢ]		94	110		99
Sheriff CL Plus [Ⓢ]		99	106		95
Sowing date	7 May	12 May	15 May		7 Jun
Rainfall J–M (mm)	77	85	113		8
Rainfall A–O (mm)	282	236	145		270

For more information click this [LINK](#)

TABLE 13 York main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.80	3.97	4.27	4.21	2.76
Vixen ^{db}				117	122
Devil ^{db}			109	110	112
Scepter ^{db}	105	108	109	109	110
RockStar ^{db}				107	104
LRPB Havoc ^{db}		95	108	112	115
Corack ^{db}	102	96	106	109	116
Ninja ^{db}	106	109	104	103	100
Kinseir ^{db}			103	102	100
Mace ^{db}	104	98	103	106	110
LRPB Cobra ^{db}	113	109	104	100	92
CLEARFIELD PLUS®					
Razor CL Plus ^{db}			105	108	111
Sheriff CL Plus ^{db}		101	102		100
Chief CL Plus ^{db}		94	100	102	103
Sowing date	6 May	11 May	7 Jun	31 May	7 Jun
Rainfall J–M (mm)	43	142	257	119	4
Rainfall A–O (mm)	221	344	261	306	250

For more information click this [LINK](#)

TABLE 14 Narrogin early season wheat.

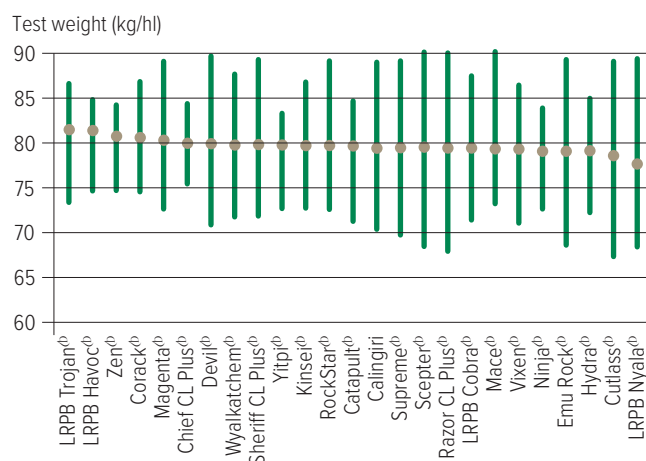
Year	2015	2016	2017	2018	2019
Mean yield (t/ha)					3.50
RockStar ^{db}	No trial	No trial	No trial	Trial failed	109
Cutlass ^{db}					107
Catapult ^{db}					106
Longsword ^{db}					106
Kinseir ^{db}					106
Illabo ^{db}					105
DS Pascal ^{db}					103
LRPB Trojan ^{db}					101
LRPB Nighthawk ^{db}					101
DS Bennett ^{db}					101
CLEARFIELD PLUS®					
Sheriff CL Plus ^{db}					101
Sowing date				28 Apr	18 Apr
Rainfall J–M (mm)				99	13
Rainfall A–O (mm)				402	324

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

FIGURE 1 Test weight (kg/hl) comparisons for main season wheat varieties from 38 NVT sites in WA 2019.



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

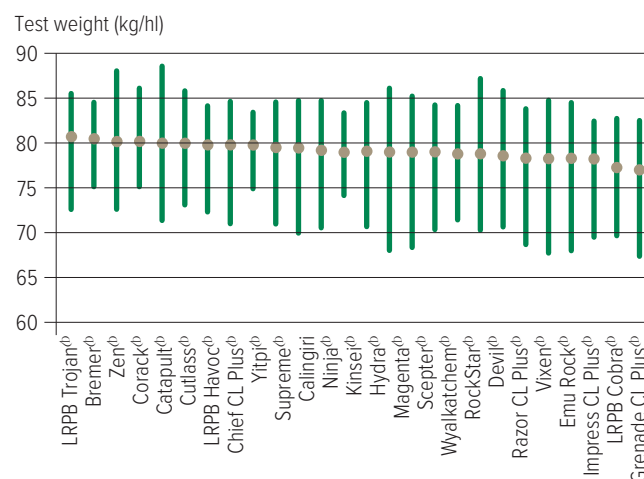


FIGURE 3 Test weight (kg/hl) comparisons for early season wheat varieties from six NVT sites in WA 2019.

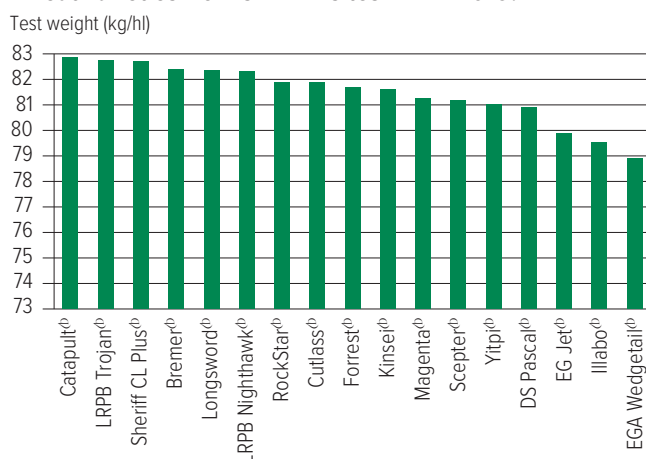


FIGURE 4 Test weight (kg/hl) comparisons for early season wheat varieties from four NVT sites in WA 2018.

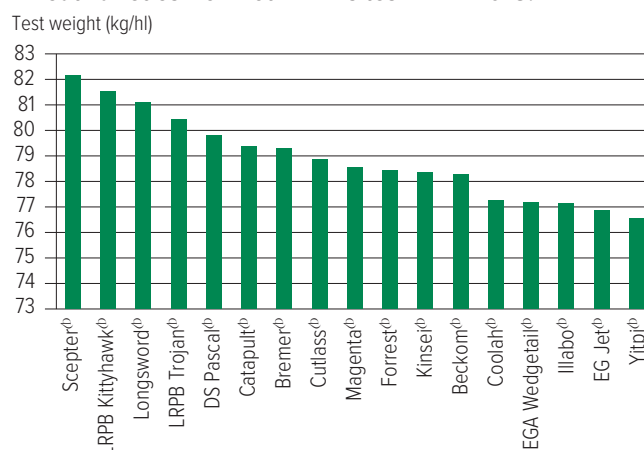


FIGURE 5 Screenings (<2.0mm) comparisons for main season wheat varieties from 38 NVT sites in WA 2019.

Screenings (% <2.0mm)

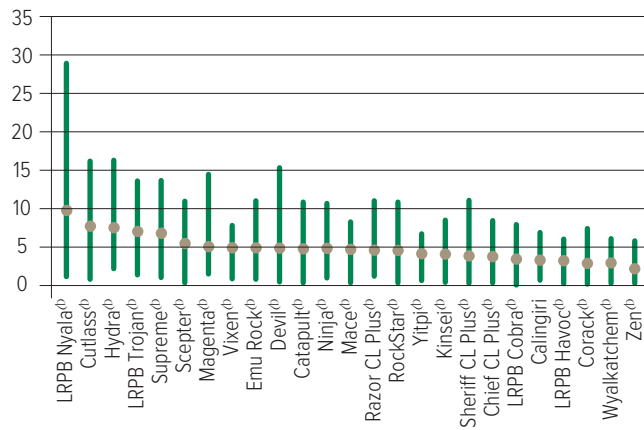


FIGURE 6 Screenings (<2.0mm) comparisons for main season wheat varieties from 38 NVT sites in WA 2018.

Screenings (% <2.0mm)

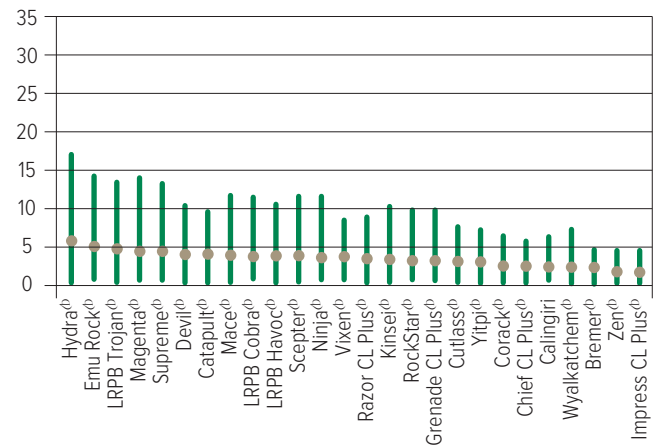


FIGURE 7 Screenings (<2.0mm) comparisons for early season wheat varieties from six NVT sites in WA 2019.

Screenings (% <2.0mm sieve)

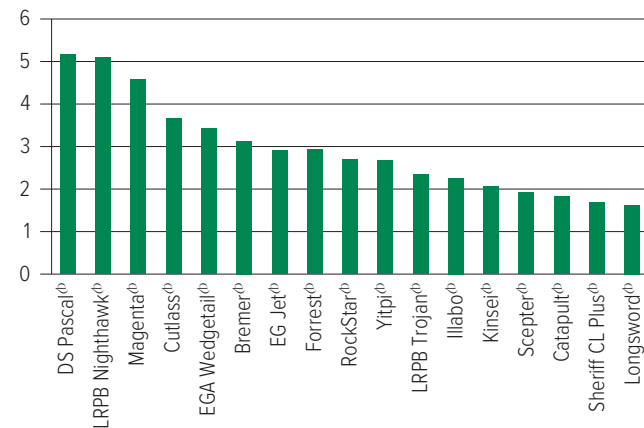
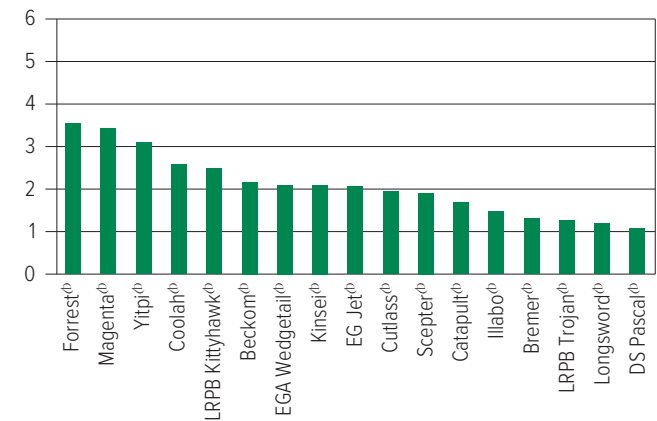


FIGURE 8 Screenings (<2.0mm) comparisons for early season wheat varieties from four NVT sites in WA 2018.

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

TABLE 15 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	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 [^]	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	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	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

CHICKPEA

FIELD PEA

LUPIN

BARLEY VARIETY YIELD PERFORMANCE – KWINANA WEST

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.81	3.15	2.45		0.57
Buff [Ⓛ]		122	134	No trial	149
Litmus [Ⓛ]	119	113	127		161
Rosalind [Ⓛ]	126	107	120		168
Fathom [Ⓛ]	106	107	117		142
Leabrook [Ⓛ]	110	103	111		138
Compass [Ⓛ]	110	99	109		149
Banks [Ⓛ]	109	102	106		123
Mundah	104		106		133
RGT Planet [Ⓛ]		106	104		88
La Trobe [Ⓛ]	109	97	103		132
CLEARFIELD PLUS [®]					
Maximus CL [Ⓛ]					149
Scope CL [Ⓛ]	99		107		121
Spartacus CL [Ⓛ]	111	94	100		139
Sowing date	24 May	16 May	11 May		7 Jun
Rainfall J–M (mm)	55	108	165		6
Rainfall A–O (mm)	214	216	140		235

For more information click this [LINK](#)

TABLE 3 Buntine main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.75	3.51		5.33	1.06
Rosalind [Ⓛ]	133	110	Trial failed	112	151
Litmus [Ⓛ]	143	110			157
Buff [Ⓛ]		119		105	150
Compass [Ⓛ]	108	110		110	135
Fathom [Ⓛ]	103	116		106	139
Leabrook [Ⓛ]	101	112		109	128
La Trobe [Ⓛ]	110	103		107	121
Mundah	115			103	128
Banks [Ⓛ]	112	103		104	116
Lockyer [Ⓛ]	95				101
CLEARFIELD PLUS [®]					
Maximus CL [Ⓛ]				109	134
Spartacus CL [Ⓛ]	116	100		108	123
Scope CL [Ⓛ]	106	106		101	122
Sowing date	23 May	10 May	15 May	25 May	7 Jun
Rainfall J–M (mm)	115	144	118	74	9
Rainfall A–O (mm)	264	186	156	254	173

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 Bolgart main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.67		5.21	4.97	3.01
Buff [Ⓛ]		Trial failed	103	125	106
Rosalind [Ⓛ]	125		100	99	110
Fathom [Ⓛ]	98		103	112	103
Leabrook [Ⓛ]	104		104	106	105
Litmus [Ⓛ]	117		96		106
RGT Planet [Ⓛ]			104	108	102
Compass [Ⓛ]	111		101	98	105
Banks [Ⓛ]	110		100	98	104
Lockyer [Ⓛ]	97		101	104	100
Bottler [Ⓛ]			99	104	100
CLEARFIELD PLUS [®]					
Maximus CL [Ⓛ]				94	107
Scope CL [Ⓛ]	99		99	102	100
Spartacus CL [Ⓛ]	120		98	85	105
Sowing date	19 May	23 May	26 May	25 May	7 Jun
Rainfall J–M (mm)	64	170	172	99	0
Rainfall A–O (mm)	247	364	260	349	270

For more information click this [LINK](#)

TABLE 4 Corrigin main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.95		4.32	4.74	2.64
Rosalind [Ⓛ]	124	Trial failed	103	113	118
Leabrook [Ⓛ]	110		107	113	111
Compass [Ⓛ]	112		103	112	113
La Trobe [Ⓛ]	112		102	108	110
Fathom [Ⓛ]	102		101	108	109
Banks [Ⓛ]	109		102	105	106
Buff [Ⓛ]			101	104	109
RGT Planet [Ⓛ]			107	104	99
Lockyer [Ⓛ]	99		102	102	100
Litmus [Ⓛ]	111		93		111
CLEARFIELD PLUS [®]					
Maximus CL [Ⓛ]				110	114
Spartacus CL [Ⓛ]	116		101	108	112
Scope CL [Ⓛ]	97		95	98	103
Sowing date	18 May	25 May	1 Jun	25 May	7 Jun
Rainfall J–M (mm)	33	118	210	96	29
Rainfall A–O (mm)	194	249	229	230	228

For more information click this [LINK](#)

TABLE 5 Dandaragan main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.36	5.26	4.68	3.28	5.38
RGT Planet ^{db}		108	106	102	103
Buff ^{db}		116	104	102	104
Leabrook ^{db}	108	104	103	107	107
Rosalind ^{db}	110	103	104	108	104
Fathom ^{db}	96	105	100	103	105
Compass ^{db}	99	99	100	106	105
Banks ^{db}	105	101	102	103	101
La Trobe ^{db}	101	97	101	105	102
Lockyer ^{db}	102		100	101	101
Granger ^{db}	107	100	102		98
CLEARFIELD PLUS [®]					
Maximus CL ^{db}				106	103
Spartacus CL ^{db}	99	93	100	105	101
Scope CL ^{db}	86	99	97	99	100
Sowing date	18 May	9 May	24 May	11 Jun	7 Jun
Rainfall J–M (mm)	61	73	88	25	10
Rainfall A–O (mm)	299	572	334	248	241

For more information click this [LINK](#)

TABLE 7 Narrogin main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.48			2.48	3.72
Rosalind ^{db}	120	Trial failed	Trial failed	110	113
Leabrook ^{db}	113			112	113
Compass ^{db}	113			106	113
Buff ^{db}				109	110
Fathom ^{db}	108			105	113
La Trobe ^{db}	110			103	107
Banks ^{db}	107			104	104
RGT Planet ^{db}				111	99
Lockyer ^{db}	101			102	102
Mundah	103				
CLEARFIELD PLUS®					
Maximus CL ^{db}				106	109
Spartacus CL ^{db}	111			101	107
Scope CL ^{db}	100			94	104
Sowing date	22 May	26 May	5 Jun	11 Jun	7 Jun
Rainfall J–M (mm)	31	119	206	99	13
Rainfall A–O (mm)	218	317	370	402	324

For more information click this [LINK](#)

TABLE 6 Miling main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				4.70	1.40
Rosalind ^{db}	No trial	No trial	No trial	115	142
Compass ^{db}				112	122
Leabrook ^{db}				112	114
Litmus ^{db}					131
La Trobe ^{db}				108	121
Buff ^{db}				108	114
Banks ^{db}				106	115
Fathom ^{db}				108	108
Mundah				103	115
Biere ^{db}					114
CLEARFIELD PLUS [®]					
Maximus CL ^{db}				112	133
Spartacus CL ^{db}				110	129
Scope CL ^{db}				101	104
Sowing date				26 May	7 Jun
Rainfall J–M (mm)				70	8
Rainfall A–O (mm)				356	270

For more information click this [LINK](#)

TABLE 8 Wickepin main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.72		4.08		
Rosalind ^(b)	129	Trial failed	103	No trial	No trial
RGT Planet ^(b)			110		
Leabrook ^(b)	115		105		
Compass ^(b)	117		100		
La Trobe ^(b)	117		99		
Banks ^(b)	112		101		
Buff ^(b)			106		
Granger ^(b)	103		102		
Lockyer ^(b)	100		102		
Fathom ^(b)	100		100		
CLEARFIELD PLUS®					
Spartacus CL ^(b)	123		97		
Scope CL ^(b)	91		94		
Sowing date	21 May	24 May	1 Jun		
Rainfall J–M (mm)	n/a	152	189		
Rainfall A–O (mm)	n/a	266	315		

For more information click this [LINK](#)

n/a not available

TABLE 9 Yealering main season barley.					
Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				3.73	
Leabrook [Ⓛ]				123	
Rosalind [Ⓛ]				122	
Compass [Ⓛ]				120	
Fathom [Ⓛ]				115	
Buff [Ⓛ]				113	
La Trobe [Ⓛ]	No trial	No trial	No trial	112	No trial
RGT Planet [Ⓛ]				108	
Banks [Ⓛ]				108	
Lockyer [Ⓛ]				104	
Commander [Ⓛ]				103	
CLEARFIELD PLUS [®]					
Maximus CL [Ⓛ]				116	
Spartacus CL [Ⓛ]				111	
Scope CL [Ⓛ]				98	
Sowing date				25 May	
Rainfall J–M (mm)				58	
Rainfall A–O (mm)				243	

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, lower grain screenings or higher 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, test weights and retention for each variety. The shorter the lines, the less variable the variety for the depicted trait.

FIGURE 1 Test weight (kg/hl) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

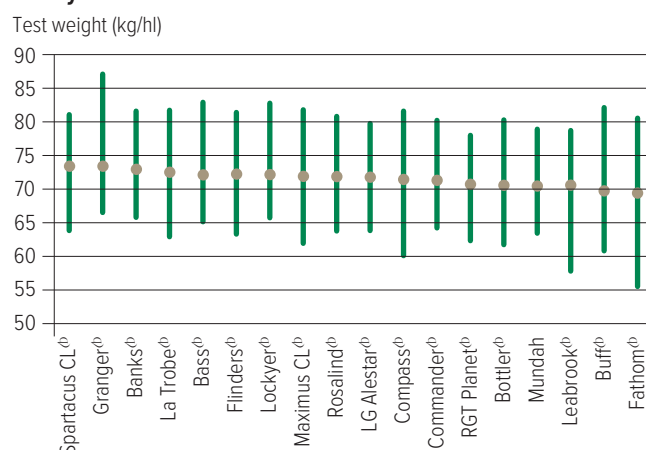


FIGURE 2 Test weight (kg/hl) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

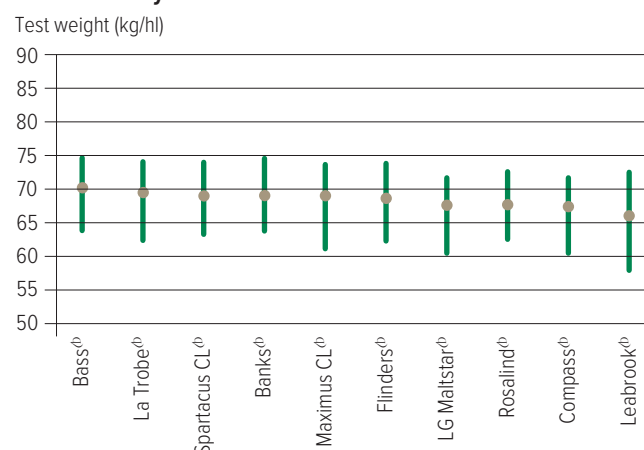


FIGURE 3 Screenings (<2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

Screenings (% <2.5mm sieve)

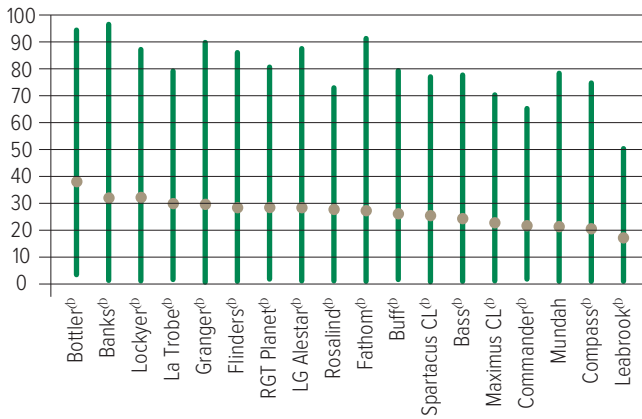


FIGURE 4 Screenings (<2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

Screenings (% <2.5mm sieve)

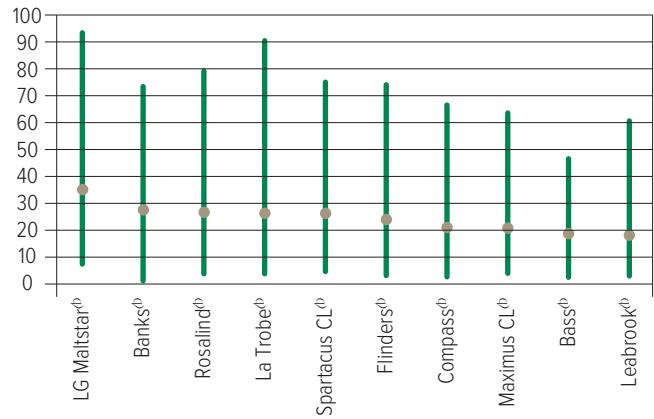


FIGURE 5 Retention (>2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2019.

Retention (% >2.5mm sieve)

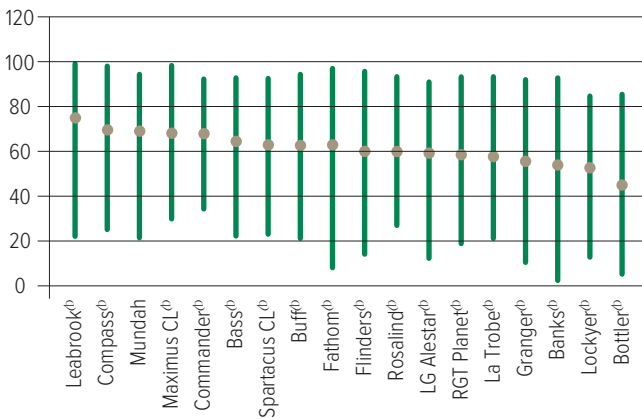
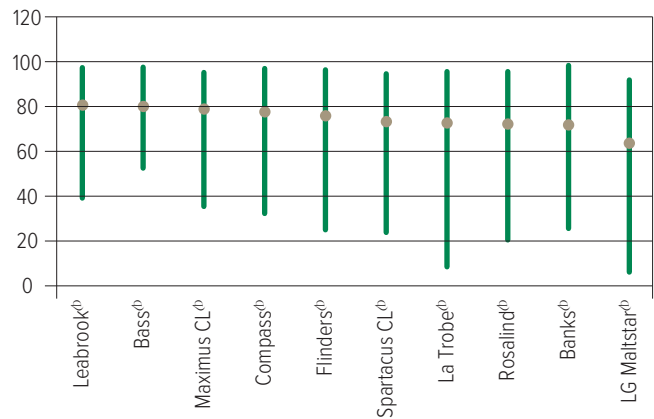


FIGURE 6 Retention (>2.5mm) comparisons for main season barley varieties from 20 NVT sites in WA 2018.

Retention (% >2.5mm sieve)



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 10 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	S _p	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	S _p	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, 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 [Ⓢ]	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 [Ⓢ]	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, [Ⓢ] 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

CHICKPEA

FIELD PEA

LUPIN

OAT VARIETY YIELD PERFORMANCE – KWINANA WEST

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.63	3.46	4.12	2.66	
Bannister ^{db}	No trial	121	121	114	103
Williams ^{db}		116	118	110	110
Wandering ^{db}		119	113	109	104
Bilby ^{db}		107	112	111	107
Kowari ^{db}		97	104	106	104
Kojonup ^{db}		105	102	99	93
Mitika ^{db}		93	99	102	100
Durack ^{db}		86	94	96	106
Carrolup		93	98	93	94
Yallara ^{db}		94	92	91	101
Sowing date		25 May	1 Jun	25 May	7 Jun
Rainfall J–M (mm)		118	210	96	29
Rainfall A–O (mm)		249	229	230	228

For more information click this [LINK](#)

TABLE 3 Dandaragan oat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	6.06	4.78	3.20		4.28
Bannister ^{db}	111	121	104	Trial failed	111
Bilby ^{db}	106	105	122		110
Williams ^{db}	109	114	96		115
Wandering ^{db}	110	115	93		113
Kowari ^{db}	100	97	124		105
Mitika ^{db}	98	96	121		100
Carrolup	93	107	95		104
Kojonup ^{db}	102	109	88		91
Durack ^{db}	93	86	112		105
Koorabup ^{db}	93	103	79		104
Sowing date	12 May	9 May	24 May	25 May	7 Jun
Rainfall J–M (mm)	61	73	88	25	10
Rainfall A–O (mm)	299	572	334	248	241

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 Cunderdin oat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.24	3.37	3.18	3.17	1.29
Wandering ^{db}	118	126	111	123	116
Bannister ^{db}	109	119	124	124	110
Bilby ^{db}	114	112	115	117	117
Williams ^{db}	105	104	119	120	113
Kowari ^{db}	109	104	106	107	112
Mitika ^{db}	102	99	101	99	104
Kojonup ^{db}	87	95	106	94	82
Durack ^{db}	100	87	91	95	110
Carrolup	85	90	96	96	99
Yallara ^{db}	94	90	86	93	101
Sowing date	22 May	16 May	26 May	31 May	7 Jun
Rainfall J–M (mm)	29	137	188	25	6
Rainfall A–O (mm)	188	258	181	248	199

For more information click this [LINK](#)

TABLE 4 York oat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.97	4.78	4.28	3.90	2.76
Bannister ^{db}	110	120	113	120	105
Wandering ^{db}	109	120	109	112	101
Bilby ^{db}	111	106	108	116	107
Williams ^{db}	110	111	105	112	108
Kowari ^{db}	106	97	102	109	104
Kojonup ^{db}	96	105	104	101	99
Mitika ^{db}	101	94	100	104	101
Durack ^{db}	99	84	90	92	100
Carrolup	88	94	93	89	86
Yallara ^{db}	93	92	89	83	93
Sowing date	19 May	11 May	7 Jun	31 May	7 Jun
Rainfall J–M (mm)	43	142	257	119	4
Rainfall A–O (mm)	221	344	261	306	250

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 5 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
HyITec® Trident	Nuseed Pty Ltd	10.00	Early maturity hybrid canola with medium-tall plant height. Suited to low-medium rainfall areas.
HyITec® Trifecta	Nuseed Pty Ltd	10.00	Not supplied
InVigor® R 4022P	BASF Australia	n/a	Not supplied
VICTORY® V75-03CL	Cargill	n/a	Mid-maturing specialty hybrid.
Xseed™ Raptor	Nuseed Pty Ltd	n/a	An early-mid maturing hybrid. Suited to medium-high rainfall areas. Medium plant height.

n/a not available, * EPR amount is ex-GST, ^{dh} 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

CHICKPEA

FIELD PEA

LUPIN

CANOLA VARIETY YIELD PERFORMANCE – KWINANA WEST

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.41	3.36		2.53	1.25
Saintly CL	117		No trial	100	113
Pioneer® 44Y90 (CL)	110	111		104	107
Pioneer® 45Y93 CL					104
Banker CL	103			98	104
VICTORY® V75-03CL					95
VICTORY® V7002CL					96
Hyola® 575CL	90	91		92	94
Sowing date	18 May	21 Apr		3 May	7 Jun
Rainfall J–M (mm)	64	170		99	0
Rainfall A–O (mm)	247	364		349	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 Dandaragan mid season CL canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.10	1.40		
Pioneer® 45Y93 CL	Trial failed		108	Trial failed	No trial
Pioneer® 44Y90 (CL)		111	110		
Saintly CL			109		
Banker CL			103		
Pioneer® 45Y91 (CL)			101		
VICTORY® V7002CL			93		
Hyola® 575CL		87	89		
Sowing date	18 May	22 Apr	2 May	25 May	
Rainfall J–M (mm)	61	73	88	25	
Rainfall A–O (mm)	299	572	334	248	

For more information click this [LINK](#)

TABLE 3 Williams mid season CL canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.36	3.37	2.15	2.83	
Pioneer® 44Y90 (CL)	111	114	114	109	No trial
Saintly CL	113		111	104	
Pioneer® 45Y91 (CL)		107	110	104	
Hyola® 575CL	91	89	91	91	
Sowing date	2 May	27 Apr	4 May	26 Apr	
Rainfall J–M (mm)	68	88	229	103	
Rainfall A–O (mm)	243	303	420	415	

For more information click this [LINK](#)

TABLE 4 Bolgart mid season RR canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.41	3.36		2.53	1.25
Xseed™ Raptor			No trial		104
Pioneer® 44Y27 (RR)		108		107	108
InVigor® R 4022P					113
Pioneer® 43Y29 RR					108
Nuseed GT-53	104	105		113	100
Hyola® 410XX					103
DG 408RR		103		106	103
InVigor® R 3520		98		100	108
Hyola® 506RR		101		103	102
InVigor® R 5520P				94	104
Sowing date	18 May	21 Apr		3 May	7 Jun
Rainfall J–M (mm)	64	170		99	0
Rainfall A–O (mm)	247	364		349	270

For more information click this [LINK](#)

TABLE 5 Cunderdin mid season RR canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.16	1.78	1.96	2.47	0.87
InVigor® R 3520		112		102	112
InVigor® R 4022P					114
Pioneer® 44Y27 (RR)		110	106	106	111
Pioneer® 43Y29 RR			111		109
Xseed™ Raptor					108
Hyola® 410XX					106
DG 408RR		103	100	105	105
Hyola® 506RR			101	103	104
InVigor® R 5520P				96	103
Nuseed GT-53	99	99	95	109	103
Sowing date	18 May	22 Apr	27 Apr	25 May	7 Jun
Rainfall J–M (mm)	29	137	188	25	6
Rainfall A–O (mm)	188	258	181	248	199

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.10	1.40		2.75
Xseed™ Raptor	Trial failed			Trial failed	107
Nuseed GT-53		115	110		105
Pioneer® 44Y27 (RR)		110	111		107
Hyola® 410XX					104
Pioneer® 43Y29 RR					105
DG 408RR		106	106		103
InVigor® R 4022P					106
Hyola® 506RR			103		102
InVigor® R 5520P			99		101
InVigor® R 3520		92			102
Sowing date	18 May	22 Apr	2 May	25 May	24 May
Rainfall J–M (mm)	61	73	88	25	10
Rainfall A–O (mm)	299	572	334	248	241

For more information click this [LINK](#)**TABLE 7 Buntine early season RR canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.04		2.24	0.85
Xseed™ Raptor	No trial		Trial failed		102
Hyola® 410XX					100
Pioneer® 44Y27 (RR)		106			110
DG 408RR		107		105	106
Nuseed GT-53		107		106	94
InVigor® R 4022P					113
Hyola® 506RR				104	96
Pioneer® 43Y29 RR					98
Pioneer® 43Y23 (RR)		102		100	108
InVigor® R 3520		98		99	112
Sowing date		23 Apr	23 Apr	25 May	7 Jun
Rainfall J–M (mm)		144	118	74	9
Rainfall A–O (mm)		186	156	254	173

For more information click this [LINK](#)**TABLE 8 Corrigin early season RR canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.85	2.39	2.27		
Pioneer® 45Y28 RR			110	No trial	No trial
Pioneer® 44Y27 (RR)		107	109		
DG 408RR		105	105		
InVigor® R 3520		108	103		
Pioneer® 43Y23 (RR)	104	106	102		
Monola® G11	102	105	101		
Pioneer® 43Y29 RR			106		
Nuseed GT-53	104	97	102		
Nuseed GT-41	100	99	99		
Hyola® 404RR	97	100	97		
Sowing date	18 May	25 Apr	28 Apr		
Rainfall J–M (mm)	33	118	210		
Rainfall A–O (mm)	194	249	229		

For more information click this [LINK](#)**TABLE 9 Kellerberrin early season RR canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.25	2.22	1.66	1.34
Xseed™ Raptor	Trial failed				101
Pioneer® 44Y27 (RR)		112	111	107	106
Hyola® 410XX					100
InVigor® R 4022P					108
InVigor® R 3520		114	102	105	107
Pioneer® 43Y23 (RR)		112	103	107	105
Hyola® 404RR		101	99	104	98
Pioneer® 43Y29 RR			105		99
Sowing date	18 May	23 Apr	28 Apr	25 May	7 Jun
Rainfall J–M (mm)	66	149	164	39	7
Rainfall A–O (mm)	159	240	258	245	216

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				1.54	
Pioneer® 44Y27 (RR)	No trial	No trial	No trial	113	No trial
DG 408RR				112	
Pioneer® 43Y23 (RR)				111	
InVigor® R 3520				109	
Nuseed GT-41				105	
Hyola® 404RR				103	
Nuseed GT-53				102	
Hyola® 506RR				101	
InVigor® R 4020P				92	
Sowing date				25 May	
Rainfall J–M (mm)				58	
Rainfall A–O (mm)				243	

For more information click this [LINK](#)

TABLE 11 Bolgart mid season TT canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.41	3.36		2.53	1.25
HyTTec® Trident			No trial	127	113
HyTTec® Trifecta				117	114
HyTTec® Trophy				116	111
InVigor® T 4510		115		109	112
Hyola® 550TT				111	110
Hyola® 350TT				106	110
Hyola® 559TT	111	104		113	105
SF Turbine TT	109	107		106	106
DG 670TT		110		102	103
SF Ignite TT		110		104	100
Sowing date	18 May	21 Apr		3 May	7 Jun
Rainfall J–M (mm)	64	170		99	0
Rainfall A–O (mm)	247	364		349	270

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.16	1.78	1.96	2.47	0.87
HyTTec® Trident			104	120	122
Hyola® 550TT				109	115
InVigor® T 4510		114	111	106	116
HyTTec® Trophy			106	112	116
Hyola® 350TT				105	114
Hyola® 559TT	112	105	99	110	110
SF Turbine TT	106	107	105	104	108
BASF 3000 TR			102	102	106
Hyola® 530XT					102
DG 670TT		103		100	103
Sowing date	18 May	22 Apr	27 Apr	25 May	7 Jun
Rainfall J–M (mm)	29	137	188	25	6
Rainfall A–O (mm)	188	258	181	248	199

For more information click this [LINK](#)**TABLE 13 Dandaragan mid season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		3.10	1.40		2.75
HyTTec® Trident	Trial failed			Trial failed	117
HyTTec® Trifecta					115
HyTTec® Trophy			122		113
InVigor® T 4510		118	117		111
Hyola® 550TT					108
Hyola® 559TT		112	112		106
Hyola® 350TT					107
SF Ignite TT		114			104
DG 670TT		112			104
SF Turbine TT		109	109		105
Sowing date	18 May	22 Apr	2 May	25 May	24 May
Rainfall J–M (mm)	61	73	88	25	10
Rainfall A–O (mm)	299	572	334	248	241

For more information click this [LINK](#)**TABLE 14 Williams mid season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.36	3.37	2.15	2.83	2.26
HyTTec® Trifecta				123	120
HyTTec® Trophy			118	119	115
InVigor® T 4510		119	118	114	115
SF Ignite TT		116	120	113	106
DG 670TT		115	118	110	108
Hyola® 550TT				108	109
SF Turbine TT	108	109	107	107	107
SF Spark TT					103
Pioneer® 45T03 TT					101
Hyola® 530XT					101
Sowing date	2 May	27 Apr	4 May	26 Apr	16 May
Rainfall J–M (mm)	68	88	229	103	37
Rainfall A–O (mm)	243	303	420	415	335

For more information click this [LINK](#)**TABLE 15 Buntine early season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.04		2.24	0.85
HyTTec® Trident	No trial		Trial failed	113	117
Hyola® 550TT					113
InVigor® T 4510		109		110	108
HyTTec® Trophy				109	107
Hyola® 350TT					113
Pioneer® 44T02 TT		106		105	110
InVigor® T 3510				107	106
SF Spark TT					104
BASF 3000 TR		100		98	107
ATR Bonito ^{db}		101		100	90
Sowing date		23 Apr	23 Apr	25 May	7 Jun
Rainfall J–M (mm)		144	118	74	9
Rainfall A–O (mm)		186	156	254	173

For more information click this [LINK](#)**TABLE 16 Corrigin early season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.85	2.39	2.27		
HyTTec® Trident			115	No trial	No trial
Hyola® 350TT			109		
InVigor® T 4510		106	111		
HyTTec® Trophy			110		
Hyola® 559TT	113	105	109		
Pioneer® 44T02 TT	112	107	107		
SF Turbine TT	105	102	104		
BASF 3000 TR	101	106	100		
ATR Bonito ^{db}	94	94	96		
ATR Stingray ^{db}	88	92	92		
Sowing date	18 May	25 Apr	28 Apr		
Rainfall J–M (mm)	33	118	210		
Rainfall A–O (mm)	194	249	229		

For more information click this [LINK](#)

TABLE 17 Yealering early season TT canola.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)				1.54	
HyTTec® Trident	No trial	No trial	No trial	135	No trial
Hyola® 350TT				119	
Pioneer® 44T02 TT				113	
InVigor® T 4510				112	
Hyola® 559TT				112	
HyTTec® Trophy				112	
BASF 3000 TR				109	
InVigor® T 3510				107	
SF Spark TT				106	
SF Turbine TT				101	
Sowing date				25 May	
Rainfall J–M (mm)				58	
Rainfall A–O (mm)				243	

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 18 Canola disease guide for Western Australia.

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
TRIAZINE-TOLERANT VARIETIES					
ATR Bonito [Ⓛ]	MS	R-MR	R	R	Open pollinated
ATR Mako [Ⓛ]	MR	R-MR	R	R	Open pollinated
ATR Stingray [Ⓛ]	MR	R	R	R	Open pollinated
ATR Wahoo [Ⓛ]	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

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 18 Canola disease guide for Western Australia (continued).

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
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
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 – KWINANA WEST

The following table contains yield results from the top-performing varieties within each NVT location in Kwinana West for the past five seasons. Data is presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The performance of varieties not listed within this table can be found by further interrogation of the NVT website via the link below the table.

Error bars, normally used to compare data, can be viewed within the graph option also found via the website link below the 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 1 Wongan Hills desi chickpea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		0.97	1.00	0.58	0.42
PBA Striker ^{db}	No trial	107	115	98	115
PBA Maiden ^{db}		110	97	102	111
Genesis™ 090		97	114	90	114
PBA Slasher ^{db}		105	101	98	114
Neelam ^{db}		109	101	101	94
Genesis™ 836		97	97	100	90
Sowing date		19 May	26 May	12 Jun	7 Jun
Rainfall J–M (mm)		159	210	55	6
Rainfall A–O (mm)		271	208	341	235

For more information click this [LINK](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

LUPIN

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 2 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 ^{db}	S		S	MRMS	MS	
Genesis™ 836	S	MS	S	MRMS _p	MS _p	
Neelam ^{db}	S	S	S	MRMS	MS	MI
PBA Maiden ^{db}	S	MS	S	MRMS	MRMS	IVI
PBA Slasher ^{db}	S	MS	S	MRMS	MRMS	MTMI
PBA Striker ^{db}	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 – KWINANA WEST

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.08	1.84	2.32	2.07	
PBA Butler ^{db}	101	104	106	119	No trial
PBA Pearl ^{db}	94	99	87	119	
PBA Wharton ^{db}	103	106	97	90	
PBA Gunyah ^{db}	95	83	100	92	
Kaspa ^{db}	89	69	100	94	
PBA Twilight ^{db}	93	79	94	85	
Parafield ^{db}	70	51	69	83	
Sowing date	12 May	24 May	2 Jun	25 May	
Rainfall J–M (mm)	39	86	197	69	
Rainfall A–O (mm)	257	341	314	365	

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 Wongan Hills field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.02	0.99	0.66	0.86
PBA Butler ^{db}	No trial	107	90	112	108
PBA Wharton ^{db}		102	110	96	93
PBA Pearl ^{db}		114	102	47	86
PBA Gunyah ^{db}		75	101	103	97
PBA Oura ^{db}		87	109	58	84
PBA Twilight ^{db}		68	107	93	90
Kaspa ^{db}		55	96	114	97
PBA Percy ^{db}		59	117	48	90
Sowing date		19 May	26 May	12 Jun	7 Jun
Rainfall J–M (mm)		159	210	55	6
Rainfall A–O (mm)		271	208	341	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 ^{db}	MS	S	MR	MRMS	S	S
PBA Butler ^{db}	MS	S	MR	MRMS	S	MS
PBA Gunyah ^{db}	MS	S	MR	MRMS	S	S
PBA Oura ^{db}	MS	S	MR	MRMS	S	MS
PBA Pearl ^{db}	MS	S	MR	MRMS	S	MS
PBA Percy ^{db}	MS	S	MR	RMR	S	MRMS
PBA Twilight ^{db}	MS	S	MR	MRMS	S	S
PBA Wharton ^{db}	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 ^ϕ	National Lupin Initiative	3.00	A very widely adapted variety with a maturity similar to Jurien ^ϕ offering high and stable yields in all lupin growing areas, particularly WA.

* 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

CHICKPEA

FIELD PEA

LUPIN

LUPIN VARIETY YIELD PERFORMANCE – KWINANA WEST

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.46			0.68
PBA Jurien ^{db}		113			113
PBA Barlock ^{db}		109			101
Coyote ^{db}		107			106
PBA Bateman ^{db}		103			107
Mandelup ^{db}		106			96
PBA Gunyidi ^{db}		102			106
Coromup ^{db}		96			107
PBA Leeman ^{db}		97			100
Wonga					79
Sowing date		10 May			7 Jun
Rainfall J–M (mm)		144			9
Rainfall A–O (mm)		186			173

n/a not available

For more information click this [LINK](#)

TABLE 3 Dandaragan narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.98	3.79	1.91	1.44	2.97
PBA Jurien ^{db}	111	117	109		105
Coyote ^{db}	108	111	118	87	111
PBA Barlock ^{db}	109	111	102		98
Mandelup ^{db}	106	107	106		100
PBA Bateman ^{db}	108	107		65	105
PBA Gunyidi ^{db}	107	105	98		100
Wonga					84
PBA Leeman ^{db}	96	96		97	100
Coromup ^{db}	97	96	92	78	98
Sowing date	8 May	10 May	9 Apr	25 May	24 May
Rainfall J–M (mm)	61	73	88	25	10
Rainfall A–O (mm)	299	572	334	248	241

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 Cunderdin narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.83	2.03	2.72	1.46	0.74
PBA Jurien ^{db}	108	118	110		107
Coyote ^{db}	109	105	115	108	104
PBA Barlock ^{db}	108	109	103		93
PBA Bateman ^{db}	108	101		118	113
PBA Gunyidi ^{db}	105	102	102		112
Mandelup ^{db}	106	103	104		89
Coromup ^{db}	95	101	96	113	115
PBA Leeman ^{db}	96	98		90	101
Wonga					71
Sowing date	6 May	18 May	18 Apr	25 May	7 Jun
Rainfall J–M (mm)	29	137	188	25	6
Rainfall A–O (mm)	188	258	181	248	199

For more information click this [LINK](#)

TABLE 4 Pingelly narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.03	1.67	3.14	2.40	2.55
Coyote ^{db}	117	111	106	118	110
PBA Jurien ^{db}	113	106	111		112
PBA Bateman ^{db}	117	106		111	109
PBA Gunyidi ^{db}	112	102	105		106
PBA Barlock ^{db}	112	104	102		102
Mandelup ^{db}	110	105	99		100
Coromup ^{db}	92	94	104	94	102
PBA Leeman ^{db}	93	98		97	98
Wonga					85
Sowing date	12 May	24 May	28 Apr	25 May	23 May
Rainfall J–M (mm)	39	86	197	69	15
Rainfall A–O (mm)	257	341	314	365	301

For more information click this [LINK](#)

TABLE 5 Wongan Hills R.S. narrow-leaf lupin.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.48	3.00	1.85	1.64	1.42
Coyote [Ⓛ]	117	124	124	120	111
PBA Bateman [Ⓛ]	115	121		121	112
PBA Gonyidi [Ⓛ]	111	111	106		106
PBA Jurien [Ⓛ]	117	110	99		100
Mandelup [Ⓛ]	110	107	101		94
PBA Barlock [Ⓛ]	113	105	92		91
Coromup [Ⓛ]	93	93	95	102	105
PBA Leeman [Ⓛ]	93	95		95	101
Wonga					78
Sowing date	5 Jun	19 May	22 Apr	25 May	7 Jun
Rainfall J–M (mm)	n/a	n/a	133	55	6
Rainfall A–O (mm)	n/a	n/a	222	341	235

n/a not available

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 6 Lupin disease guide for Western Australia.

Variety	Brown leaf spot	Phomopsis stem infection	Anthraxnose 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 Gonyidi [Ⓛ]	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