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GRAINS RESEARCH  
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# NVT HARVEST REPORT



**APRIL 2020**  
**CENTRAL NEW SOUTH WALES**



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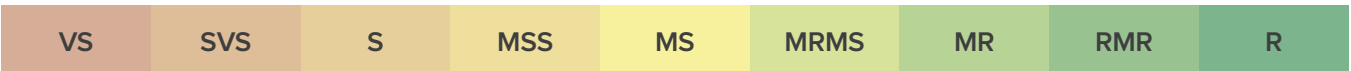
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## LEGEND: MEAN VARIETY YIELD PERFORMANCE



Long-term mean yield illustrated by colour gradient from low (red) to high (green)

## DISEASE RATING COLOUR RANGE



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

Refer to *2020 Winter Crop Variety Sowing Guide for New South Wales* for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide)

# INTRODUCTION

This *NVT Harvest Report* provides information to support growers and advisers with decisions on variety selection for Central New South Wales. 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 Central New South Wales 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 Winter Crop Variety Sowing Guide for New South Wales* for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide).

## INTERPRETING LONG-TERM YIELD DATA

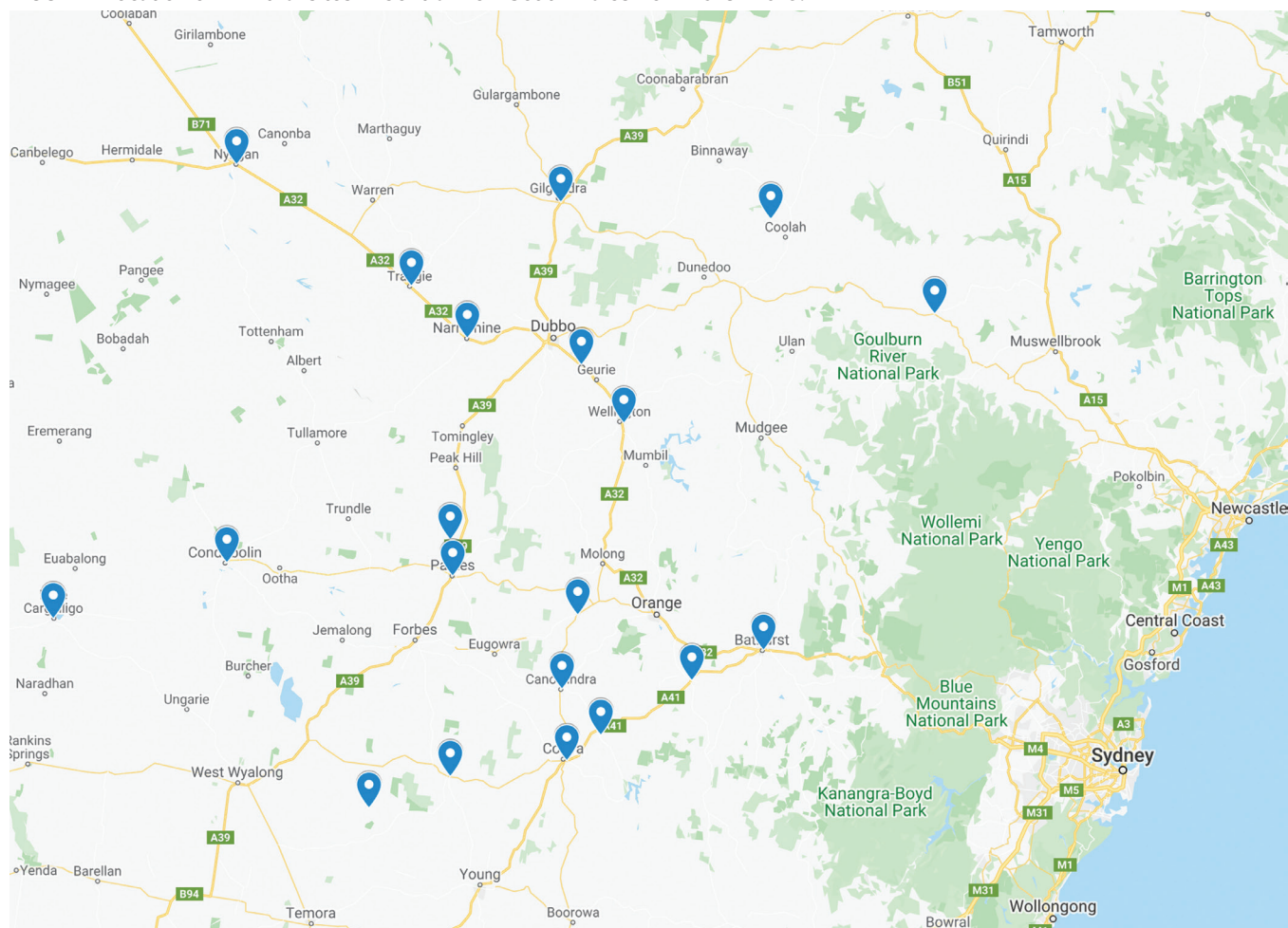
A factor analytic (FA) mixed model approach is used in the multi-environment trial (MET) analysis conducted by GRDC, supported by the Statistics for the Australian Grains Industry (SAGI) program. This approach generates long-term MET values for varieties at an individual trial level.

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 Central New South Wales 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 Central New South Wales.

## NVT SITE LOCATIONS – CENTRAL NEW SOUTH WALES 2015–2019

FIGURE 1 Location of NVT trial sites in Central New South Wales from 2015–2019.



SOURCE: NVT ONLINE

# WHEAT

## NEW WHEAT VARIETIES

The following information is for wheat varieties released during 2019 and since the 2019 Winter Crop Variety Sowing Guide for New South Wales was published.

Variety	Breeding company	End Point Royalty* (\$)	Comments supplied by breeding company
Catapult <sup>♢</sup>	Australian Grain Technologies	3.25	Longer season than Scepter <sup>♢</sup> , with a mid-late maturity allowing growers to achieve Scepter <sup>♢</sup> -like yields when sown in late April. Catapult <sup>♢</sup> has a very flexible sowing window with wide adaptation and is viewed as a great alternative to Trojan <sup>♢</sup> , Magenta <sup>♢</sup> , Cutlass <sup>♢</sup> and Yitpi <sup>♢</sup> . Catapult <sup>♢</sup> offers a unique combination of features to growers with Australian Hard quality (WA/SA/VIC/southern NSW).
EG Jet <sup>♢</sup>	Elders/Seedmark	n/a	Not supplied
LRPB Hellfire <sup>♢</sup>	LongReach Plant Breeders Pty Ltd	4.25	Not supplied
LRPB Nighthawk <sup>♢</sup>	LongReach Plant Breeders Pty Ltd	4.25	Not supplied
LRPB Parakeet <sup>♢</sup>	LongReach Plant Breeders Pty Ltd	3.75	Aimed at the 'Rosella' noodle markets in NSW and Victoria.
RockStar <sup>♢</sup>	InterGrain	3.50	High-yielding, mid-late flowering variety with a similar time to flowering as LRPB Trojan <sup>♢</sup> and Magenta <sup>♢</sup> . It has an AH classification in WA, SA and VIC and has a potential AH classification in southern NSW. The variety provides a large yield improvement within the mid-late flowering variety class. RockStar <sup>♢</sup> offers an opportunity to maximise sowing opportunities and spread flowering windows during critical spring stress periods. It has good Stem rust (MR), Yellow leaf spot (MRMS) and Stripe rust (RMR) resistance. It has a good grain size, good test weight and has a moderate plant height similar to Mace <sup>♢</sup> . RockStar <sup>♢</sup> is an excellent varietal alternative to LRPB Trojan <sup>♢</sup> , Magenta <sup>♢</sup> , Yitpi <sup>♢</sup> and Cutlass <sup>♢</sup> .
Sunchaser <sup>♢</sup>	Australian Grain Technologies	3.50	Early-mid maturing alternative to Suntop <sup>♢</sup> for NSW and Queensland growers, offering better grain size than Suntop <sup>♢</sup> while retaining its very wide adaptation, yield and agronomic suitability. Slightly faster maturing than Suntop <sup>♢</sup> and suited to the main season planting window, with APH grain quality in NSW and Queensland.

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

Refer to 2020 Winter Crop Variety Sowing Guide for New South Wales for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide)

## WHEAT VARIETY YIELD PERFORMANCE – CENTRAL NEW SOUTH WALES

The following tables contain yield results from the top-performing varieties within each NVT location in Central New South Wales 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 Canowindra main season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>4.75</b>	<b>6.66</b>	<b>2.76</b>	<b>2.22</b>	<b>1.48</b>
Vixen <sup>db</sup>			118	109	140
Scepter <sup>db</sup>	108	108	118	111	131
Catapult <sup>db</sup>				110	125
Beckom <sup>db</sup>	107	108	108	108	117
RockStar <sup>db</sup>					125
Cutlass <sup>db</sup>	106	108	106	107	98
LRPB Impala <sup>db</sup>	103	103	116	108	99
Corack <sup>db</sup>	107	102	109	98	115
LRPB Flanker <sup>db</sup>	107	106	110	108	78
LRPB Trojan <sup>db</sup>	104	106	103	102	101
<b>CLEARFIELD® PLUS</b>					
Sheriff CL Plus <sup>db</sup>					118
Razor CL Plus <sup>db</sup>			106	100	120
Chief CL Plus <sup>db</sup>					109
<b>Sowing date</b>	<b>29 Apr</b>	<b>16 May</b>	<b>3 May</b>	<b>1 May</b>	<b>26 May</b>
<b>Rainfall J–M (mm)</b>	<b>105</b>	<b>169</b>	<b>204</b>	<b>76</b>	<b>131</b>
<b>Rainfall A–O (mm)</b>	<b>457</b>	<b>593</b>	<b>220</b>	<b>174</b>	<b>121</b>

For more information click this [LINK](#)

**TABLE 3 Goonumbra main season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>3.68</b>	<b>5.85</b>		<b>2.29</b>	
SEA Condamine		108		100	
LRPB Mustang <sup>db</sup>		104		97	
Mitch <sup>db</sup>	97	107		110	
Cutlass <sup>db</sup>				112	
LRPB Reliant <sup>db</sup>	108	104		99	
LRPB Flanker <sup>db</sup>	102	105		105	
Sunprime <sup>db</sup>				100	
LRPB Impala <sup>db</sup>	97	106		107	
LRPB Hellfire <sup>db</sup>				103	
Beckom <sup>db</sup>	104	102		103	
<b>CLEARFIELD® PLUS</b>					
Elmore CL Plus <sup>db</sup>	97	99		104	
<b>Sowing date</b>	<b>14 May</b>	<b>25 May</b>	<b>18 May</b>	<b>5 Jun</b>	<b>27 May</b>
<b>Rainfall J–M (mm)</b>	<b>89</b>	<b>110</b>	<b>170</b>	<b>38</b>	<b>92</b>
<b>Rainfall A–O (mm)</b>	<b>250</b>	<b>696</b>	<b>175</b>	<b>147</b>	<b>114</b>

For more information click this [LINK](#)

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

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

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

**TABLE 2 Gilgandra main season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>3.95</b>	<b>3.73</b>	<b>1.82</b>	<b>1.87</b>	<b>1.47</b>
Catapult <sup>db</sup>					117
Cutlass <sup>db</sup>			116	104	101
Scepter <sup>db</sup>			112	105	120
LRPB Flanker <sup>db</sup>	103	109	112	105	103
LRPB Reliant <sup>db</sup>	108	102	108	104	111
LRPB Hellfire <sup>db</sup>				103	113
Buchanan <sup>db</sup>			103	103	112
LRPB Impala <sup>db</sup>	100	111	105	104	104
SEA Condamine		107	105	100	108
Beckom <sup>db</sup>	106	100	109	102	107
<b>CLEARFIELD® PLUS</b>					
Elmore CL Plus <sup>db</sup>	97	104	102	102	100
<b>Sowing date</b>	<b>12 May</b>	<b>24 May</b>	<b>24 May</b>	<b>7 Jun</b>	<b>17 May</b>
<b>Rainfall J–M (mm)</b>	<b>89</b>	<b>113</b>	<b>175</b>	<b>141</b>	<b>99</b>
<b>Rainfall A–O (mm)</b>	<b>324</b>	<b>673</b>	<b>153</b>	<b>159</b>	<b>49</b>

For more information click this [LINK](#)

**TABLE 4 Lake Cargelligo main season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>					<b>1.59</b>
Scepter <sup>db</sup>					117
Vixen <sup>db</sup>					116
RockStar <sup>db</sup>					111
Catapult <sup>db</sup>					109
Emu Rock <sup>db</sup>	No trial	No trial	No trial	No trial	109
Corack <sup>db</sup>					108
Beckom <sup>db</sup>					107
Sunprime <sup>db</sup>					103
LRPB Reliant <sup>db</sup>					103
LRPB Impala <sup>db</sup>					102
<b>CLEARFIELD® PLUS</b>					
Razor CL Plus <sup>db</sup>					112
Sheriff CL Plus <sup>db</sup>					109
Chief CL Plus <sup>db</sup>					104
<b>Sowing date</b>					<b>15 Jun</b>
<b>Rainfall J–M (mm)</b>					<b>82</b>
<b>Rainfall A–O (mm)</b>					<b>87</b>

For more information click this [LINK](#)



TABLE 5 Merriwa main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.23	4.44	3.38	1.43	1.78
Cutlass <sup>db</sup>			107	115	105
Coolah <sup>db</sup>		108	109	113	106
Mitch <sup>db</sup>	105	109	104	110	98
Beckom <sup>db</sup>	104	103	112	106	103
LRPB Flanker <sup>db</sup>	104	103	105	111	103
DS Faraday <sup>db</sup>	103		105	109	104
LRPB Mustang <sup>db</sup>		102	108	103	97
LRPB Reliant <sup>db</sup>	106	99	108	105	101
Borlaug 100 <sup>db</sup>			106	100	92
Sunprime <sup>db</sup>			103	102	96
<b>CLEARFIELD® PLUS</b>					
Elmore CL Plus <sup>db</sup>	97	102	99	103	103
Sowing date	9 Jun	15 May	18 May	15 Jun	17 May
Rainfall J–M (mm)	133	182	216	121	202
Rainfall A–O (mm)	328	441	101	107	44

For more information click this [LINK](#)

TABLE 7 Trangie main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.34		1.26	1.03	
LRPB Mustang <sup>db</sup>		No trial	94	117	Trial failed
LRPB Reliant <sup>db</sup>	119		104	105	
Beckom <sup>db</sup>	108		117	114	
Borlaug 100 <sup>db</sup>			103	93	
Sunchaser <sup>db</sup>				104	
Sunprime <sup>db</sup>			101	107	
Scepter <sup>db</sup>			124	114	
LRPB Hellfire <sup>db</sup>				109	
Vixen <sup>db</sup>				111	
SEA Condamine				106	
CLEARFIELD® PLUS					
Elmore CL Plus <sup>db</sup>	92		105	106	
Sowing date	15 May		22 Jun	19 Jun	21 May
Rainfall J–M (mm)	71		107	47	92
Rainfall A–O (mm)	314		144	137	45

For more information click this [LINK](#)

TABLE 6 Nyngan main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.97	4.80	1.75		
Cobalt <sup>db</sup>	111	109	113	Trial failed	Trial failed
LRPB Mustang <sup>db</sup>		97	114		
Tenfour <sup>db</sup>	119	97	116		
Beckom <sup>db</sup>	111	102	108		
LRPB Oryx <sup>db</sup>		103	114		
LRPB Reliant <sup>db</sup>	111	102	104		
Sunprime <sup>db</sup>			109		
Scepter <sup>db</sup>			114		
Borlaug 100 <sup>db</sup>			101		
LRPB Impala <sup>db</sup>	93	107	107		
CLEARFIELD® PLUS					
Elmore CL Plus <sup>db</sup>	95	102	102		
Hatchet CL Plus <sup>db</sup>		93	95		
Sowing date	5 Aug	14 May	11 May	16 May	22 May
Rainfall J–M (mm)	109	111	150	82	111
Rainfall A–O (mm)	223	483	112	107	11

For more information click this [LINK](#)

TABLE 8 Wongarbon main season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.78	4.11		1.89	
SEA Condamine		112	Trial failed	105	Trial failed
LRPB Mustang <sup>db</sup>		97		100	
LRPB Hellfire <sup>db</sup>				112	
Borlaug 100 <sup>db</sup>				99	
LRPB Impala <sup>db</sup>	95	109		118	
Sunprime <sup>db</sup>				107	
Buchanan <sup>db</sup>	101	111		99	
Beckom <sup>db</sup>	107	99		109	
LRPB Reliant <sup>db</sup>	109	104		93	
Cutlass <sup>db</sup>				112	
CLEARFIELD® PLUS					
Elmore CL Plus <sup>db</sup>	95	101		107	
Sowing date	27 May	25 May	24 May	8 Jun	8 Jun
Rainfall J–M (mm)	137	138	171	83	173
Rainfall A–O (mm)	353	617	170	187	81

For more information click this [LINK](#)

TABLE 9 Canowindra early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	5.74	7.09		2.15	1.61
Catapult <sup>db</sup>			Trial failed	114	126
RockStar <sup>db</sup>					122
Scepter <sup>db</sup>				111	120
Beckom <sup>db</sup>	109	108		107	116
Cutlass <sup>db</sup>	109	110		106	107
LRPB Trojan <sup>db</sup>	109	106		104	109
RGT Zanzibar		110		111	100
LRPB Flanker <sup>db</sup>	107	105		100	105
Coolah <sup>db</sup>	104	103		102	106
Suntop <sup>db</sup>	104	100		101	114
CLEARFIELD® PLUS					
Sheriff CL Plus <sup>db</sup>					115
Sowing date	29 Apr	16 May	3 May	1 May	1 May
Rainfall J–M (mm)	105	169	204	76	131
Rainfall A–O (mm)	457	593	190	174	145

For more information click this [LINK](#)

TABLE 10 Condobolin early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.16	5.44			1.35
RockStar <sup>db</sup>			Trial failed	Trial failed	142
Catapult <sup>db</sup>					139
Scepter <sup>db</sup>					130
Beckom <sup>db</sup>	159	105			127
LRPB Trojan <sup>db</sup>	154	102			117
RGT Zanzibar		116			111
Suntop <sup>db</sup>	148	96			119
EG Jet <sup>db</sup>					108
Coolah <sup>db</sup>	123	101			109
Cutlass <sup>db</sup>	115	103			107
CLEARFIELD® PLUS					
Sheriff CL Plus <sup>db</sup>					125
Sowing date	4 May	4 May	2 May	10 May	16 Apr
Rainfall J–M (mm)	95	103	204	38	68
Rainfall A–O (mm)	263	481	151	91	69

For more information click this [LINK](#)

TABLE 11 Gilgandra early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.83	4.36	2.28	1.37	1.87
Catapult <sup>db</sup>					136
Coolah <sup>db</sup>	109	106	109	99	121
LRPB Flanker <sup>db</sup>	112	98	113	96	118
Mitch <sup>db</sup>	107	105	103	95	120
LRPB Reliant <sup>db</sup>					117
Sunmax <sup>db</sup>	97	112	112	120	99
Cutlass <sup>db</sup>			105	98	114
DS Faraday <sup>db</sup>	108	97	114	103	108
LRPB Nighthawk <sup>db</sup>				135	91
EGA Gregory <sup>db</sup>	109	96	109	98	110
Sowing date	28 Apr	28 Apr	5 May	23 Apr	23 Apr
Rainfall J–M (mm)	89	113	175	141	99
Rainfall A–O (mm)	324	673	153	159	49

For more information click this [LINK](#)

TABLE 12 Goonumbra early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.99	5.67		2.07	
Coolah <sup>db</sup>	107	108	Trial failed	110	Trial failed
Mitch <sup>db</sup>	106	107		108	
Scepter <sup>db</sup>				99	
Cutlass <sup>db</sup>				108	
LRPB Flanker <sup>db</sup>	108	106		102	
Beckom <sup>db</sup>	109	103		95	
Sunmax <sup>db</sup>	96	104		116	
EG Jet <sup>db</sup>				104	
DS Faraday <sup>db</sup>	104	103		100	
EGA Gregory <sup>db</sup>	105	103		98	
Sowing date	28 Apr	28 Apr	5 May	24 Apr	23 Apr
Rainfall J–M (mm)	89	110	170	38	92
Rainfall A–O (mm)	250	696	175	147	114

For more information click this [LINK](#)

TABLE 13 Quandialla early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.26	5.41			1.40
RockStar <sup>db</sup>			Trial failed	Trial failed	160
Catapult <sup>db</sup>					158
Scepter <sup>db</sup>					153
Beckom <sup>db</sup>	115	109			147
LRPB Trojan <sup>db</sup>	115	107			143
RGT Zanzibar		118			113
Cutlass <sup>db</sup>	110	103			120
Suntop <sup>db</sup>	109	99			128
Coolah <sup>db</sup>	107	103			118
EG Jet <sup>db</sup>					100
CLEARFIELD® PLUS					
Sheriff CL Plus <sup>db</sup>					127
Sowing date	4 May	5 May	2 May	7 May	7 May
Rainfall J–M (mm)	74	85	123	85	185
Rainfall A–O (mm)	348	536	181	117	120

For more information click this [LINK](#)

TABLE 14 Trangie early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.29		1.14	1.25	
Scepter <sup>db</sup>		No trial		107	Trial failed
Beckom <sup>db</sup>	120		113	98	
Coolah <sup>db</sup>	112		124	114	
Suntop <sup>db</sup>	116		119	96	
Cutlass <sup>db</sup>			124	109	
Mitch <sup>db</sup>	111		119	110	
LRPB Flanker <sup>db</sup>	113		107	110	
EG Jet <sup>db</sup>				104	
LRPB Lancer <sup>db</sup>	111		105	94	
LRPB Gauntlet <sup>db</sup>	113		100	90	
Sowing date	24 Apr		11 May	8 May	10 May
Rainfall J–M (mm)	71		107	47	92
Rainfall A–O (mm)	314		144	137	45

For more information click this [LINK](#)

TABLE 15 Wongarbone early season wheat.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.61	3.55		2.18	
RGT Zanzibar		121	Trial failed	141	Trial failed
Sunmax <sup>db</sup>	96	114		122	
Coolah <sup>db</sup>	108	103		113	
Cutlass <sup>db</sup>				111	
LRPB Flanker <sup>db</sup>	113	100		98	
Scepter <sup>db</sup>				95	
Mitch <sup>db</sup>	106	100		111	
Sunlamb <sup>db</sup>	96	112		110	
DS Faraday <sup>db</sup>	109	103		94	
LRPB Nighthawk <sup>db</sup>				121	
Sowing date	4 May	4 May	12 May	9 May	8 May
Rainfall J–M (mm)	137	138	171	83	173
Rainfall A–O (mm)	353	617	170	187	81

For more information click this [LINK](#)

**TABLE 16 Blayney long season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>6.53</b>	<b>5.36</b>	<b>4.20</b>	<b>5.44</b>	<b>2.22</b>
LRPB Beaufort <sup>Ⓛ</sup>			111	114	124
RGT Zanzibar		109	105	105	128
DS Bennett <sup>Ⓛ</sup>		113	110	109	112
RGT Accroc	112	112	117	114	98
RGT Calabro	103	109	115	115	101
SF Adagio	104	101	110	107	99
Sunlamb <sup>Ⓛ</sup>	99	100	99	106	116
Longsword <sup>Ⓛ</sup>		90	90	93	134
DS Pascal <sup>Ⓛ</sup>	107	100	96	92	102
Manning <sup>Ⓛ</sup>	88	92	115	112	89
<b>Sowing date</b>	<b>13 Apr</b>	<b>28 Apr</b>	<b>21 Apr</b>	<b>1 May</b>	<b>4 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>110</b>	<b>155</b>	<b>162</b>	<b>96</b>	<b>160</b>
<b>Rainfall A–O (mm)</b>	<b>430</b>	<b>1036</b>	<b>202</b>	<b>144</b>	<b>148</b>

For more information click this [LINK](#)**TABLE 17 Coolah long season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>3.95</b>	<b>5.64</b>			<b>1.77</b>
LRPB Beaufort <sup>Ⓛ</sup>			Trial failed	No trial	145
RGT Zanzibar		115			100
DS Pascal <sup>Ⓛ</sup>					134
DS Bennett <sup>Ⓛ</sup>		113			113
Illabo <sup>Ⓛ</sup>		105			86
Longsword <sup>Ⓛ</sup>		95			94
RGT Calabro	99				106
LRPB Nighthawk <sup>Ⓛ</sup>					85
SF Adagio	99	108			76
Forrest <sup>Ⓛ</sup>	93	105			96
<b>Sowing date</b>	<b>16 Apr</b>	<b>29 Apr</b>	<b>11 May</b>		<b>9 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>130</b>	<b>140</b>	<b>253</b>		<b>316</b>
<b>Rainfall A–O (mm)</b>	<b>409</b>	<b>583</b>	<b>134</b>		<b>88</b>

For more information click this [LINK](#)**TABLE 18 Woodstock long season wheat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>3.87</b>	<b>6.44</b>	<b>5.50</b>		
LRPB Beaufort <sup>Ⓛ</sup>			122	No trial	Trial failed
RGT Accroc	97	127	112		
RGT Zanzibar		108	111		
DS Bennett <sup>Ⓛ</sup>		111	114		
RGT Calabro	97	113	114		
SF Adagio	98	113	106		
SQP Revenue <sup>Ⓛ</sup>	93	108	106		
Manning <sup>Ⓛ</sup>	80	113	105		
Sunmax <sup>Ⓛ</sup>	105	100	101		
Mackellar	93	106			
<b>Sowing date</b>	<b>14 Apr</b>	<b>28 Apr</b>	<b>20 Apr</b>		<b>4 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>159</b>	<b>100</b>	<b>190</b>		<b>204</b>
<b>Rainfall A–O (mm)</b>	<b>438</b>	<b>820</b>	<b>272</b>		<b>198</b>

For more information click this [LINK](#)

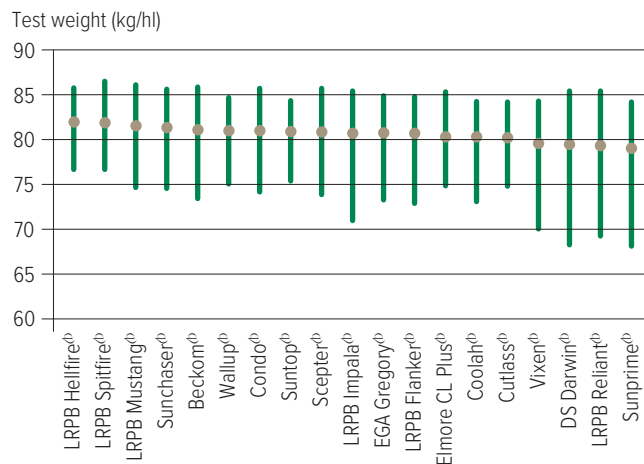


## WHEAT VARIETY QUALITY – NEW SOUTH WALES

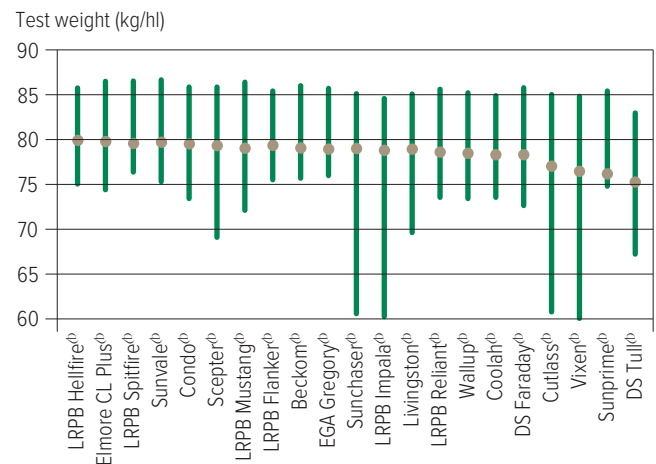
Grain quality for individual varieties varies from site to site and from year to year. However, long-term and across-site trends highlight varieties that can consistently achieve either higher test weights or low grain screenings under a wider range of environments. The following figures show the grain quality trends as either histograms or box and whisker plots from 2018 and 2019 NVT averaged for all trials in New South

Wales. 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.

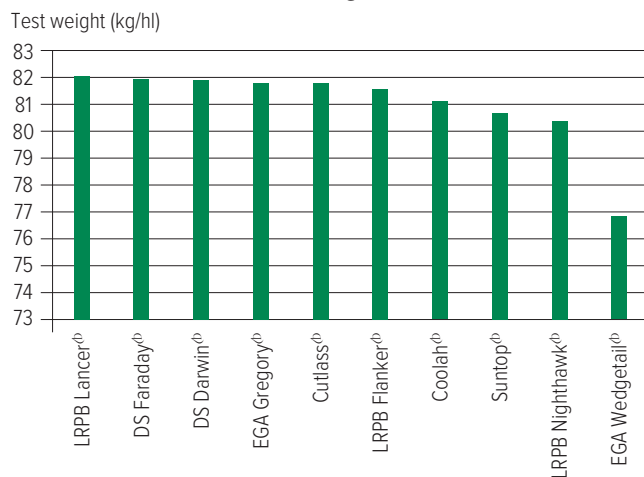
**FIGURE 1 Test weight (kg/hl) comparisons for main season wheat varieties from 14 NVT sites in NSW 2019.**



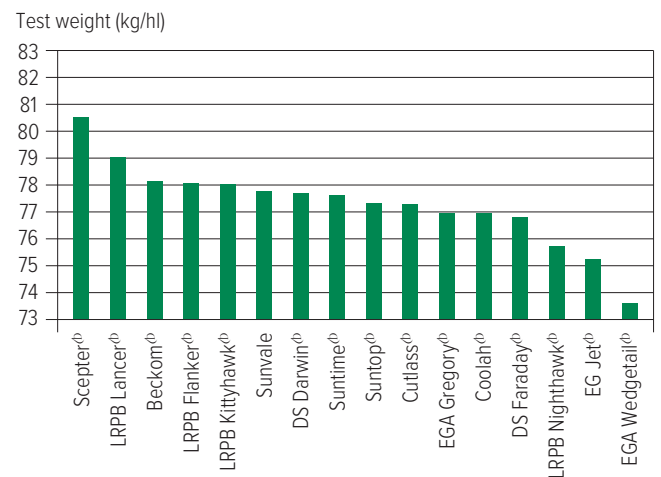
**FIGURE 2 Test weight (kg/hl) comparisons for main season wheat varieties from 11 NVT sites in NSW 2018.**



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

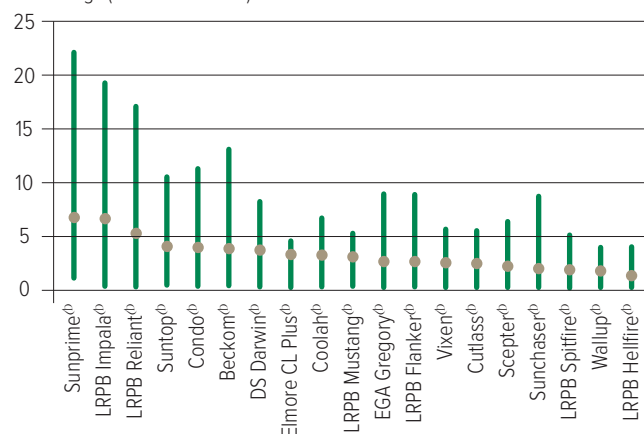


**FIGURE 4 Test weight (kg/hl) comparisons for early season wheat varieties from 10 NVT sites in NSW 2018.**



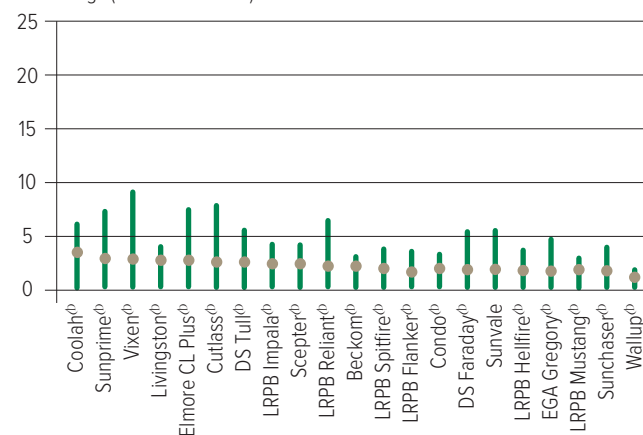
**FIGURE 5 Screenings (<2.0mm) comparisons for main season wheat varieties from 14 NVT sites in NSW 2019.**

Screenings (% <2.0mm sieve)



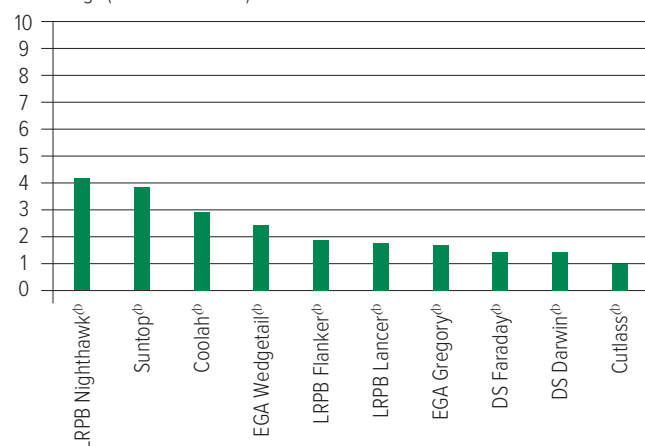
**FIGURE 6 Screenings (<2.0mm) comparisons for main season wheat varieties from 11 NVT sites in NSW 2018.**

Screenings (% <2.0mm sieve)



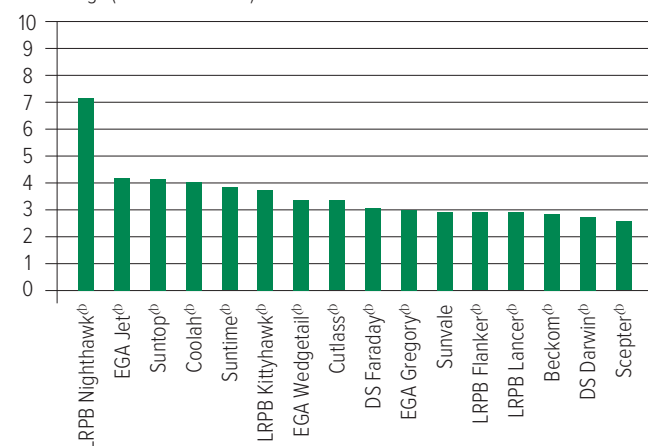
**FIGURE 7 Screenings (<2.0mm) comparisons for early season wheat varieties from eight NVT sites in NSW 2019.**

Screenings (% <2.0mm sieve)



**FIGURE 8 Screenings (<2.0mm) comparisons for early season wheat varieties from 10 NVT sites in NSW 2018.**

Screenings (% <2.0mm sieve)



## WHEAT VARIETY DISEASE RATINGS – NEW SOUTH WALES

The following table contains varietal ratings for the predominant diseases of wheat in New South Wales.

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

TABLE 19 Wheat disease guide for New South Wales.

Variety	Crown rot	Common root rot	Flag smut	Leaf rust	Stem rust	Stripe rust	Septoria tritici blotch	Yellow leaf spot	RLN ( <i>Pratylenchus neglectus</i> ) Resistance	RLN ( <i>Pratylenchus neglectus</i> ) Tolerance	RLN ( <i>Pratylenchus thornei</i> ) Resistance	RLN ( <i>Pratylenchus thornei</i> ) Tolerance	CCN
Beckom <sup>db</sup>	S	MSS	MRMS	MSS	MRMS	MRMS	S	MSS	S	MTMI	MSS	TMT	R
Buchanan <sup>db</sup>	S	MS	MS	MR	MRMS	RMR	MSS	MRMS	MSS	MT	MS	MT	MS
Condo <sup>db</sup>	S	MSS	MSS	MSS	MR	MSS	S	MS	S	MT	MS	TMT	MR
Coolah <sup>db</sup>	MSS	S	R	RMR/MS	MR	RMR	MSS	MSS	S	TMT	MS	MT	S
Corack <sup>db</sup>	S	MS	S	SVS	MR	MS	S	MRMS	MSS	MT	MSS	MI	RMR
Cutlass <sup>db</sup>	S	MS	MSS	R	R	MS	MSS	MSS	MSS	TMT	MSS	MI	MR
DS Bennett <sup>db</sup>	VS	S	SVS	SVS	MRMS	S	MSS	MRMS	S		S		S
DS Darwin <sup>db</sup>	S	MSS	MR	MSS	MRMS	MRMS	S	S	S	MII	S	MI	MSS
DS Faraday <sup>db</sup>	MSS	S	RMR	R/MS	MR	RMR	MSS	MSS	S	MTMI	MSS	MT	MS
DS Pascal <sup>db</sup>	S	MS	S	MS	MSS	RMR	MSS	MRMS	S	MTMI	S	IVI	S
DS Tull <sup>db</sup>	S	MSS	R	MSS	MR	RMR	S	S	S	MT	MSS	MTMI	MSS
EGA Gregory <sup>db</sup>	S	MSS	MSS	RMR/MS	MR	MR	MSS	S	S	MT	MSS	MT	S
EGA Wedgetail <sup>db</sup>	S			MSS	MRMS	MS	MSS	MSS	SVS	MII	VS	MII	S
Elmore CL Plus <sup>db</sup>	S	S	MSS	RMR	MR	MRMS	MSS	S	S	TMT	S	MII	S
Emu Rock <sup>db</sup>	MSS	MS	MS/MR	SVS	MS	MSS	SVS	MRMS	MSS	MI	S	IVI	S
Grenade CL Plus <sup>db</sup>	S	MS	MR	S	MR	MRMS	S	S	MSS		S	IVI	R
Illabo <sup>db</sup>	Sp	MSS	R	S	MRMS	MRp	MSS	MS	S	VI	S	MII	MRMS
Kiora	S	MS	MRMS	MRMS	MR	RMR	MSS	MSS	S	MTMI	MRMS	MT	MS
Livingston <sup>db</sup>	S			R/MSS	MRMS	MRMS	S	MSS	VS	MI	MS	MT	S
Longsword <sup>db</sup>	MSS	MS	MRMS	MSS	MR	MR	MSS	MRMS	MRMS	VI	MR	MI	MRMS
LRPB Cobra <sup>db</sup>	S	MS	S	MR/S	MR^	MSS	MSS	MRMS	MSS	MTMI	MSS	MI	MS
LRPB Dart <sup>db</sup>	MSS			S	MR	MR	SVS	MSS	S	MI	MS	MI	S
LRPB Flanker <sup>db</sup>	MSS	MSS	R	RMR/MSS	MR	RMR	MSS	MSS	S	MT	MSS	MT	S
LRPB Gazelle <sup>db</sup>	S			RMR	MR	MR	MSS	MSS	S	MT	S	MII	MSS
LRPB Impala <sup>db</sup>	MSS	MSS	S	SVS	MR	MR	SVS	MSS	SVS	MTMI	S	MII	MSS
LRPB Kittyhawk <sup>db</sup>	SVS	S	RMR	-	-	RMR	MRMS	MRMS	S	MTMI	S	I	S
LRPB Lancer <sup>db</sup>	MSS	S	MSS	RMR/MS	R	MR	MS	MRMS	S	MTMI	MS	TMT	S
LRPB Mustang <sup>db</sup>	MSS	MS	R	MSS	MRMS	RMR	S	MSS	S	MI	MSS	MTMI	MR
LRPB Nighthawk <sup>db</sup>	MSSp	MSS	MSS	MSS	RMR	RMR	MSS	MS	S		MS	MII	MS
LRPB Parakeet <sup>db</sup>	MSS	MS	MSS	R	MR	RMR	S	MSS	MRMS	MT	S	MII	MS
LRPB Reliant <sup>db</sup>	MS	MSS	R	RMR	R	MR	S	S	SVS	MTMI	MSS	TMT	MSS
LRPB Spitfire <sup>db</sup>	MS	MSS	MSS	MSS	MR	MR	S	MSS	MSS	MTMI	MS	MTMI	MS

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.

TABLE 19 Wheat disease guide for New South Wales (continued).

Variety	Crown rot	Common root rot	Flag smut	Leaf rust	Stem rust	Stripe rust	Septoria tritici blotch	Yellow leaf spot	RLN ( <i>Pratylenchus neglectus</i> ) Resistance	RLN ( <i>Pratylenchus neglectus</i> ) Tolerance	RLN ( <i>Pratylenchus thornei</i> ) Resistance	RLN ( <i>Pratylenchus thornei</i> ) Tolerance	CCN
LRPB Trojan <sup>db</sup>	MS	MS	SVS	MR/MS	MRMS	MSS	MS	MSS	MSS	MT	MSS	MI	MS
Mace <sup>db</sup>	S	MS	S	MSS	MRMS	SVS	S	MRMS	MS	MII	MS	MT	MRMS
Manning <sup>db</sup>	VS	SVS	R	MSS	MR	RMR	MRMS	MR	MSS		S		S
Mitch <sup>db</sup>	MS	MS	S	MSS	MRMS	MR	S	MSS	S	T	S	MT	S
Razor CL Plus <sup>db</sup>	S	MSS	RMR	S	MRMS	MS	SVS	MSS	S	MT	MRMS	MI	MR
RGT Accroc	SVS		SVS	SVS	MS	R	MRMS	MR	S		MSS		S
RGT Zanzibar	S	S	SVS	SVS	VS	R	S	MS	S		MSp	MI	MSS
RockStar <sup>db</sup>	Sp	MS	VS	S	MR	MRMS	MSS	MRMS	MRMS		MRMS	MI	MSS
Sunchaser <sup>db</sup>	MSSp	MSS	RMR/R	R	MR	MR	MSS	MS	S		MSS	TMT	MSS
Sunguard <sup>db</sup>	MS	MSS	VS	RMR	R	MR	MSS	MSS	SVS	MTMI	S	MT	
Sunlamb <sup>db</sup>	S	MS	S	MS	RMR	MRMS	MR	MRMS	MSS	I	MSS	MI	MR
Sunmate <sup>db</sup>	MSS	MS	RMR	MRMS	MRMS	MRMS	S	MSS	S	MTMI	MRMS	TMT	MRMS
Sunmax <sup>db</sup>	MSS	MSS	RMR	MS	MR	RMR	MSS	MS	S	TMT	MS	MI	MRMS
Sunprime <sup>db</sup>	Sp	MSS	MS/RMR	MR/S	MRMS	RMR	S	MSS	S		S	MTMI	MS
Suntime <sup>db</sup>	MSS	S	MS	MS	MRMS	RMR	MSS	S	S	MTMI	MRMS	MT	MRMS
Suntop <sup>db</sup>	MSS	MS	R	MR	MRMS	MRMS	MSS	MSS	S	MT	MRMS	TMT	S
Sunvale	MSS			MRMS	RMR	MR	MSS	MSS	S	MI	MSS	MTMI	
Tenfour <sup>db</sup>	MSS	MS	MR	MSS	SVS	SVS	S	MRMS	S	MT	S	I	MS
Tungsten <sup>db</sup>	S	S	MRMS	MS#	MS	RMR	MSS	MSS	MSS	MTMI	S	MI	MS
Vixen <sup>db</sup>	S	MS	SVS	SVS	MRMS	MRMS	S	MRMS	MRMS	MT	MS	I	MSS
Wallup <sup>db</sup>	S	MS	SVS	S	MRMS	MRMS	S	MSS	MS	MT	MRMS	MT	MR
DURUM													
Bitalli <sup>db</sup>	SVSp	MS	R	MR	MR	MS	MRMS	MRMS	MSS		RMR	MII	S
DBA-Aurora <sup>db</sup>	VS	MSS		R	RMR	MRMS	MR	MRMS	MRMS	IVI	RMR	MT	MSS
DBA Bindaroi <sup>db</sup>	SVS	MSS	R	MR	MRMS	MS	MS	MRMS	MRMS	MI	MR	MTMI	MS
DBA Lillaroi <sup>db</sup>	SVS	MSS		RMR	RMR	MS	MRMS	MRMS	MRMS	MII	RMR	MT	S
DBA Vittaroi <sup>db</sup>	SVS	MSS	R	MR	MR	MS	MS	MRMS	MS	MII	MR	MI	S
EGA Bellaroi <sup>db</sup>	VS			RMR	MR	MS	MRMS	MRMS	MRMS	MII	MR	MTMI	
Jandaroi <sup>db</sup>	VS			MRMS	R/MSS	MR	MRMS	MRMS	MRMS	MI	MRMS	MTMI	MS
Westcourt <sup>db</sup>	SVSp	MS	R	RMR	RMR	MR	MS	MRMS	MS		MR	MT	MSS

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 *2019 Winter Crop Variety Sowing Guide for New South Wales* was published.

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

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

Refer to *2020 Winter Crop Variety Sowing Guide for New South Wales* for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

## BARLEY VARIETY YIELD PERFORMANCE – CENTRAL NEW SOUTH WALES

The following tables contain yield results from the top-performing varieties within each NVT location in Central New South Wales 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 Condobolin main season barley.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.84	5.67			1.34
Rosalind <sup>db</sup>	159	108	Trial failed	Trial failed	145
RGT Planet <sup>db</sup>		115			112
Leabrook <sup>db</sup>	127	100			132
Hindmarsh <sup>db</sup>	164	97			121
La Trobe <sup>db</sup>	163	97			115
Fathom <sup>db</sup>	140	99			117
Banks <sup>db</sup>	111	102			113
Compass <sup>db</sup>	139	95			120
Bottler <sup>db</sup>		105			102
Buff <sup>db</sup>		100			85
CLEARFIELD®					
Maximus CL <sup>db</sup>					130
Spartacus CL <sup>db</sup>	165	97			132
Scope CL <sup>db</sup>	105	93			80
Sowing date	28 May	19 May	17 May	14 Jun	23 May
Rainfall J–M (mm)	95	103	204	38	68
Rainfall A–O (mm)	263	481	151	91	69

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 Gilgandra main season barley.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>4.01</b>	<b>3.35</b>	<b>2.45</b>	<b>1.85</b>	<b>1.21</b>
RGT Planet <sup>db</sup>		123	114	103	95
Leabrook <sup>db</sup>	112	99	106	117	120
Compass <sup>db</sup>	111	93	103	116	130
Rosalind <sup>db</sup>	111	103	106	102	109
Bottler <sup>db</sup>		114	108	103	97
Banks <sup>db</sup>	103	100	103	110	116
LG Maltstar <sup>db</sup>	95	116	108	104	94
La Trobe <sup>db</sup>	105	99	103	101	120
Hindmarsh <sup>db</sup>	105	96	102	101	127
Fathom <sup>db</sup>	110	92	100	100	112
<b>CLEARFIELD®</b>					
Spartacus CL <sup>db</sup>	105	96	100	92	111
Maximus CL <sup>db</sup>				102	126
Scope CL <sup>db</sup>	97	88	91	90	93
<b>Sowing date</b>	<b>12 May</b>	<b>24 May</b>	<b>24 May</b>	<b>7 Jun</b>	<b>17 May</b>
<b>Rainfall J–M (mm)</b>	<b>89</b>	<b>113</b>	<b>175</b>	<b>141</b>	<b>99</b>
<b>Rainfall A–O (mm)</b>	<b>324</b>	<b>673</b>	<b>153</b>	<b>159</b>	<b>49</b>

For more information click this [LINK](#)

TABLE 3 Quandialla main season barley.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.36	4.20			0.94
RGT Planet <sup>Ⓓ</sup>		127	Trial failed	Trial failed	105
Explorer <sup>Ⓓ</sup>		121			79
Rosalind <sup>Ⓓ</sup>	117	109			141
Bottler <sup>Ⓓ</sup>		110			98
LG Maltstar <sup>Ⓓ</sup>	107	108			83
Topstart	108	112			
LG Alestar <sup>Ⓓ</sup>	101	109			82
Oxford	107	112			53
Fairview <sup>Ⓓ</sup>		110			
Granger <sup>Ⓓ</sup>	102	107			82
CLEARFIELD®					
Spartacus CL <sup>Ⓓ</sup>	100	92			139
Maximus CL <sup>Ⓓ</sup>					142
Scope CL <sup>Ⓓ</sup>	80	90			106
Sowing date	14 May	19 May	31 May	20 May	25 May
Rainfall J–M (mm)	74	85	123	85	185
Rainfall A–O (mm)	348	536	181	117	120

For more information click this [LINK](#)

TABLE 4 Wongarbon main season barley.

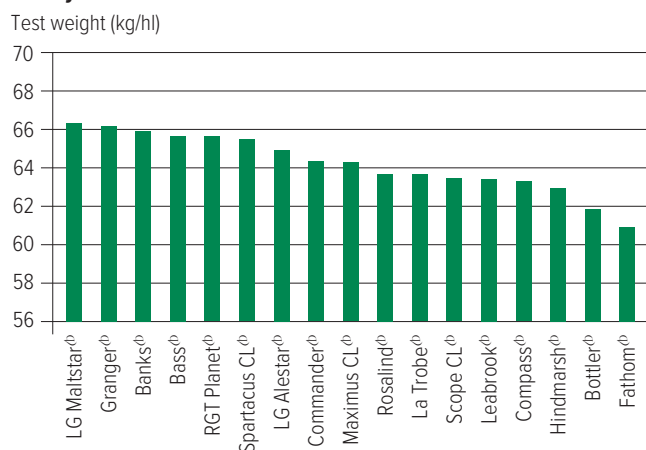
Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	4.21	3.30		2.89	
RGT Planet <sup>db</sup>		131	Trial failed	115	Trial failed
Oxford	81	135		125	
Rosalind <sup>db</sup>	123	101		93	
Topstart	89	120		118	
Leabrook <sup>db</sup>	117	96		103	
Granger <sup>db</sup>	93	115			
Bottler <sup>db</sup>		117		110	
LG Maltstar <sup>db</sup>	83	121		116	
LG Alestar <sup>db</sup>	95	111		107	
Compass <sup>db</sup>	118	87		94	
CLEARFIELD®					
Spartacus CL <sup>db</sup>	117	88		77	
Maximus CL <sup>db</sup>				79	
Scope CL <sup>db</sup>	99	81		86	
Sowing date	28 May	25 May	23 May	8 Jun	21 May
Rainfall J–M (mm)	137	138	171	83	173
Rainfall A–O (mm)	35	617	170	187	81

For more information click this [LINK](#)

## BARLEY VARIETY QUALITY – NEW SOUTH WALES

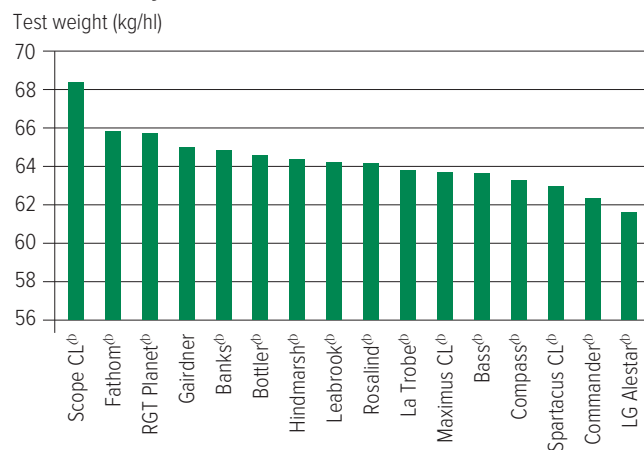
Grain quality for individual varieties varies from site to site and from year to year. However, long-term and across-site trends highlight varieties that can consistently achieve either higher test weights or low grain screenings under a wider range of environments.

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

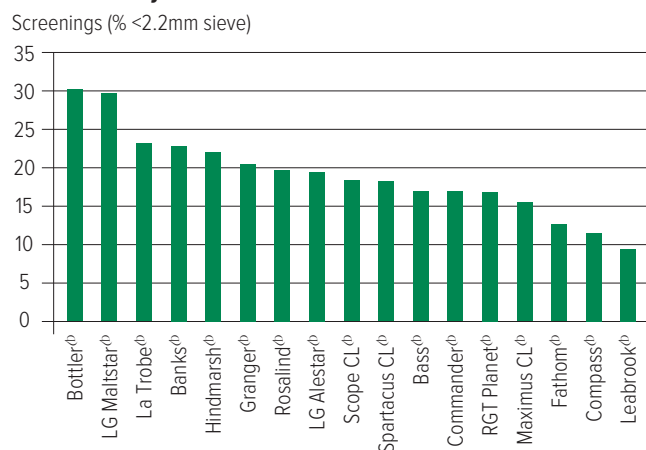


The following figures show the grain quality trends as histograms from 2018 and 2019 NVT averaged for all trials in New South Wales. Only the varieties evaluated at every site are included.

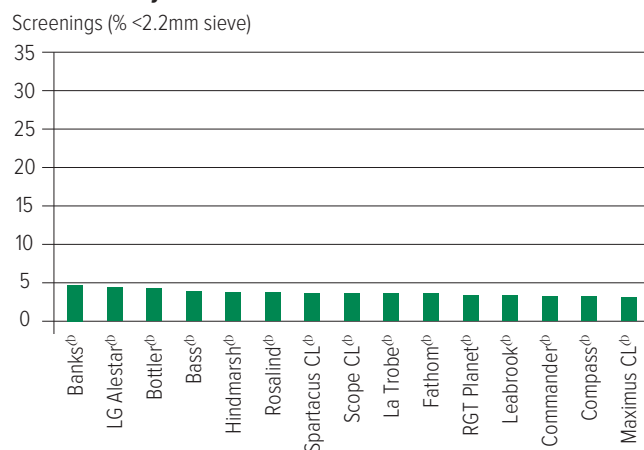
**FIGURE 2 Test weight (kg/hl) comparisons for main season barley varieties from six NVT sites in NSW 2018.**



**FIGURE 3 Screenings (<2.2mm) comparisons for main season barley varieties from five NVT sites in NSW 2019.**

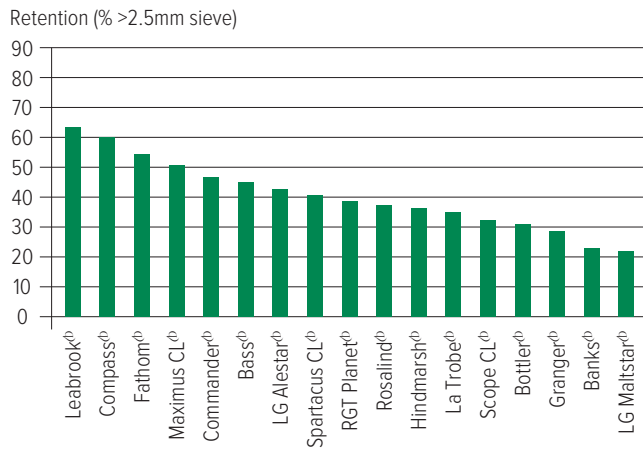


**FIGURE 4 Screenings (<2.2mm) comparisons for main season barley varieties from six NVT sites in NSW 2018.**

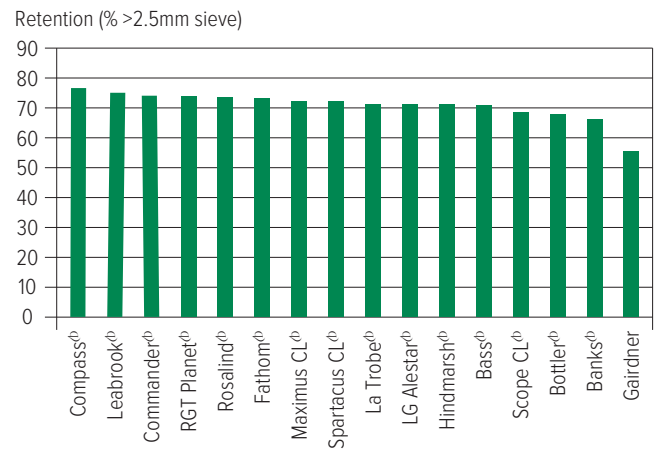




**FIGURE 5 Retention (>2.5mm) comparisons for main season barley varieties from five NVT sites in NSW 2019.**



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



## BARLEY VARIETY DISEASE RATINGS – NEW SOUTH WALES

The following table contains varietal ratings for the predominant diseases of barley in New South Wales.

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

TABLE 5 Barley disease guide for New South Wales.

Variety	Leaf scald	Net form blotch	Barley grass stripe rust	Crown rot	Common root rot	CCN	RLN ( <i>Praetylechius neglectus</i> ) Resistance	RLN ( <i>Praetylechius neglectus</i> ) Tolerance	RLN ( <i>Praetylechius thomel</i> ) Resistance	RLN ( <i>Praetylechius thomel</i> ) Tolerance
LG Alestar <sup>db</sup>	SVS	MRMS-S	R	S	MSS	R <sup>^</sup>	MR	MII	MR	MTMI
Banks <sup>db</sup>	MSS	MRMS	R	MSS	MSS	S	MRMS	MII	MR	TMT
Bass <sup>db</sup>	SVS	MSS	R	S	MS	S	MS	I	MRMS	MT
Baudin <sup>db</sup>	SVS	MRMS-S	R	Sp	S	S	S	MTMI	MSS	MII
Biere <sup>db</sup>	S	S	RMR	S	MS	S	MR	MII	MR	I
Bottler <sup>db</sup>	SVS	MS	R	S	MS		MS	MT	RMR	MII
Buff <sup>db</sup>	MSS	MS	R	S	MSS		MRMS	MTMI	MRMS	MI
Buloke <sup>db</sup>	Sp	MRMS	R	Sp		S	MRMS		MS	MII
Commander <sup>db</sup>	VS	MSS	R	S	MSS	R	MRMS	MT	MRMS	MT
Compass <sup>db</sup>	SVS	MRMS	R	S	MS	R	MRMS	T	MR	TMT
Fathom <sup>db</sup>	S	MSS	R	S	MSS	R	MRMS		MR	MT
Flinders <sup>db</sup>	SVS	MRMS	R	SVS	MS	S	MRMS		MR	MI
Gairdner	VS	MRMS	R	S	MSS	S	MRMS	MI	MSS	IVI
Granger <sup>db</sup>	VS	MRMS-S	R	SVS	S	R	MRMS	MII	MRMS	MTMI
Grout <sup>db</sup>	VS	MRMS-S	R	S	S		MS	MT	MRMS	MT
Hindmarsh <sup>db</sup>	MRMS-VS	MS	R	S	S	R	MRMS	MT	MRMS	TMT
La Trobe <sup>db</sup>	MRMS-VS	MS	R	SVS	S	R	MRMS	MT	MRMS	MT
LG Maltstar <sup>db</sup>	SVS	S	R	S	MSS	S	MRMS	MII	MR	MTMI
Maximus CL <sup>db</sup>	S	MRMS	R	MSSp	S	R	MRMS		MRMS	I
Oxford	SVS	MSS	R	SVS	MSS	S	MR	I	MR	MII
RGT Planet <sup>db</sup>	S	S	RMR	MSS	MSS	Rp	MRMS	MT	MR	I
Rosalind <sup>db</sup>	S	MR	R	MSS	S	R	MRMS	MT	MR	T
Schooner	S	MRMS	R	MSS	S	VS	MS		MRMS	MT
Scope CL <sup>db</sup>	SVS	MRMS	R	SVS	MS	S	MRMS	MI	MRMS	MII
Shepherd <sup>db</sup>	SVS	MR-S	R	MSS	MSS		MRMS	MI	MSS	MI
Spartacus CL <sup>db</sup>	VS	MR-S	R	S	MS	R	MRMS	MI	MRMS	MI
Topstart	SVS	SVS	R	S	MSS	S	RMR	IVI	RMR	MI
Urambie <sup>db</sup>	MS	MR	R	SVSp	MSS		MRMS		MR	VI
Westminster <sup>db</sup>	MS	MSS	R	S	MSS		MRMS	IVI	MS	I

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, ^ line contains a few susceptible off types.

# OAT

## NEW OAT VARIETIES

The following information is for oat varieties released during 2019 and since the *2019 Winter Crop Variety Sowing Guide for New South Wales* was published.

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

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

Refer to *2020 Winter Crop Variety Sowing Guide for New South Wales* for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

## OAT VARIETY YIELD PERFORMANCE – CENTRAL NEW SOUTH WALES

The following tables contain yield results from the top-performing varieties within each NVT location in Central New South Wales 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 Canowindra oat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>				<b>2.80</b>	<b>3.81</b>
Wandering <sup>db</sup>	No trial	No trial	No trial		111
Bannister <sup>db</sup>				106	113
Bilby <sup>db</sup>				104	112
Kowari <sup>db</sup>				98	107
Wombat				100	104
Mitika <sup>db</sup>				93	105
Possum				96	103
Williams <sup>db</sup>				98	102
Kojonup <sup>db</sup>					99
Carrolup					93
<b>Sowing date</b>				<b>24 May</b>	<b>26 May</b>
<b>Rainfall J–M (mm)</b>				<b>76</b>	<b>131</b>
<b>Rainfall A–O (mm)</b>				<b>174</b>	<b>145</b>

For more information click this [LINK](#)

**TABLE 3 Cowra oat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>3.04</b>	<b>4.70</b>	<b>2.29</b>		
Williams <sup>db</sup>	104	118	131	No trial	No trial
Bannister <sup>db</sup>	111	112	115		
Koorabup <sup>db</sup>	97	107	123		
Yallara <sup>db</sup>	98	103	124		
Bilby <sup>db</sup>	113	105	98		
Echidna	103	103	100		
Durack <sup>db</sup>	99	102	97		
Kowari <sup>db</sup>	107	101	86		
Wombat	96	97	98		
Possum	101	98	86		
<b>Sowing date</b>	<b>15 May</b>	<b>25 May</b>	<b>24 May</b>		
<b>Rainfall J–M (mm)</b>	<b>90</b>	<b>169</b>	<b>124</b>		
<b>Rainfall A–O (mm)</b>	<b>397</b>	<b>593</b>	<b>238</b>		

For more information click this [LINK](#)

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

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

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

**TABLE 2 Condobolin oat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.04</b>	<b>5.26</b>	<b>1.25</b>		<b>1.07</b>
Bilby <sup>db</sup>	144	110	116	Trial failed	134
Kowari <sup>db</sup>	149	103	109		127
Bannister <sup>db</sup>	90	108	114		120
Mitika <sup>db</sup>	136	98	102		115
Possum	125	101	102		109
Williams <sup>db</sup>	69	107	100		123
Durack <sup>db</sup>	130	95	96		117
Wombat	62	99	97		79
Yallara <sup>db</sup>	77	91	97		86
Koorabup <sup>db</sup>	54	79	96		78
<b>Sowing date</b>	<b>4 May</b>	<b>19 May</b>	<b>16 May</b>	<b>13 Jun</b>	<b>23 May</b>
<b>Rainfall J–M (mm)</b>	<b>95</b>	<b>103</b>	<b>204</b>	<b>38</b>	<b>68</b>
<b>Rainfall A–O (mm)</b>	<b>263</b>	<b>481</b>	<b>151</b>	<b>91</b>	<b>69</b>

For more information click this [LINK](#)

**TABLE 4 Quandialla oat.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>					<b>0.88</b>
Bilby <sup>db</sup>	Trial failed	Trial failed	Trial failed	Trial failed	136
Kowari <sup>db</sup>					125
Bannister <sup>db</sup>					120
Koorabup <sup>db</sup>					115
Yallara <sup>db</sup>					113
Mitika <sup>db</sup>					104
Durack <sup>db</sup>					103
Possum					103
Williams <sup>db</sup>					84
Wombat					80
<b>Sowing date</b>	<b>14 May</b>	<b>1 Jun</b>	<b>31 May</b>	<b>20 May</b>	<b>25 May</b>
<b>Rainfall J–M (mm)</b>	<b>74</b>	<b>85</b>	<b>123</b>	<b>85</b>	<b>185</b>
<b>Rainfall A–O (mm)</b>	<b>348</b>	<b>536</b>	<b>181</b>	<b>117</b>	<b>120</b>

For more information click this [LINK](#)



**TABLE 5 Wellington oat.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	3.13	4.91	0.59	2.57	
Yallara <sup>db</sup>	99	111	124	108	Trial failed
Koorabup <sup>db</sup>	93	105	122	112	
Durack <sup>db</sup>	109	100	106	96	
Bilby <sup>db</sup>	103	97	133	102	
Williams <sup>db</sup>	98	107	66	101	
Bannister <sup>db</sup>	93	99	107	107	
Kowari <sup>db</sup>	105	93	124	98	
Possum	103	95	102	96	
Mitika <sup>db</sup>	104	90	101	95	
Wombat	92	97	74	101	
Sowing date	18 May	15 May	5 May	23 May	2 May
Rainfall J–M (mm)	129	167	136	43	157
Rainfall A–O (mm)	353	654	150	223	130

For more information click this [LINK](#)

## OAT VARIETY DISEASE RATINGS – NEW SOUTH WALES

The following table contains varietal ratings for the predominant diseases of oat in New South Wales.

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

**TABLE 6 Oat disease guide for New South Wales.**

Variety	Stem rust	Leaf (crown) rust (Southern NSW)	Leaf (crown) rust (Northern NSW)	Barley yellow dwarf virus (BYDV)	Red leather leaf	Bacterial blight
Bannister <sup>db</sup>	S	S	S	MRMS	MSS	S
Bilby <sup>db</sup>	S	MR	MSS	MRMS <sub>p</sub>	MS	S
Carrolup	S	MSS	MSS	MSS <sub>p</sub>	S	MSS
Durack <sup>db</sup>	S	MSS	MSS	MSS	S	S
Echidna	S	S	S	MRMS	MS	MS
Kojonup <sup>db</sup>	SVS	S	S	MS <sub>p</sub>	MS	SVS
Koorabup <sup>db</sup>	S	MSS	MSS	MSS <sub>p</sub>	SVS	MSS
Kowari <sup>db</sup>	S	S	S	MSS	MS	MSS
Mitika <sup>db</sup>	S	S	S	S	S	MSS <sub>p</sub>
Possum	S	MSS	MSS	MSS	S	SVS
Wandering <sup>db</sup>	S	S	S	MS <sub>p</sub>	S	MS <sub>p</sub>
Williams <sup>db</sup>	S	MRMS	S	MRMS	MS	MSS
Wombat	S	SVS	SVS	MRMS	S	S
Yallara <sup>db</sup>	S	MSS	MSS	MSS	SVS	MSS

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

# CANOLA

## NEW CANOLA VARIETIES

The following information is for canola varieties released during 2019 and since the 2019 Winter Crop Variety Sowing Guide for New South Wales 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, <sup>♠</sup> denotes Plant Breeder's Rights apply.

Refer to 2020 Winter Crop Variety Sowing Guide for New South Wales for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

## CANOLA VARIETY YIELD PERFORMANCE – CENTRAL NEW SOUTH WALES

The following tables contain yield results from the top-performing varieties within each NVT location in Central New South Wales 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 Cudal mid-season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>2.18</b>	<b>2.73</b>	<b>0.83</b>	<b>0.82</b>	<b>0.66</b>
Pioneer® 45Y93 CL			111		115
Pioneer® 44Y90 CL	110		113	106	128
Saintly CL	102	110	108	90	149
Banker CL	109	108	103		114
Pioneer® 45Y91 CL		105	101	94	105
VICTORY® V75-03CL				102	80
VICTORY® V7002CL				87	85
Hyola® 575CL	91	90	83	80	78
<b>Sowing date</b>	<b>24 Apr</b>	<b>6 May</b>	<b>4 May</b>	<b>2 May</b>	<b>1 May</b>
<b>Rainfall J–M (mm)</b>	<b>97</b>	<b>103</b>	<b>192</b>	<b>87</b>	<b>136</b>
<b>Rainfall A–O (mm)</b>	<b>305</b>	<b>644</b>	<b>162</b>	<b>153</b>	<b>130</b>

For more information click this [LINK](#)

**TABLE 3 Parkes mid-season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.76</b>	<b>2.51</b>	<b>1.33</b>		
Pioneer® 43Y92 CL		112	120		
Saintly CL	111	111	115		
Pioneer® 44Y90 CL	109	111	109		
Pioneer® 45Y93 CL			100		
Banker CL	103	107	96		
Pioneer® 45Y91 CL		104	96		
VICTORY® V7002CL			90		
Hyola® 575CL	91	91	87		
<b>Sowing date</b>	<b>29 Apr</b>	<b>7 May</b>	<b>2 May</b>	<b>3 May</b>	<b>9 May</b>
<b>Rainfall J–M (mm)</b>	<b>51</b>	<b>102</b>	<b>219</b>	<b>62</b>	<b>98</b>
<b>Rainfall A–O (mm)</b>	<b>326</b>	<b>679</b>	<b>153</b>	<b>127</b>	<b>114</b>

For more information click this [LINK](#)

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

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

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

**TABLE 2 Grenfell mid-season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>2.98</b>	<b>2.75</b>	<b>0.69</b>		
Banker CL	110	110	109		
Saintly CL	103	108	130		
VICTORY® V7002CL			90		
Hyola® 575CL	92	89	85		
<b>Sowing date</b>	<b>23 Apr</b>	<b>6 May</b>	<b>12 May</b>	<b>9 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>143</b>	<b>85</b>	<b>116</b>	<b>71</b>	<b>145</b>
<b>Rainfall A–O (mm)</b>	<b>430</b>	<b>723</b>	<b>241</b>	<b>174</b>	<b>127</b>

For more information click this [LINK](#)

**TABLE 4 Wellington mid-season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.58</b>	<b>2.32</b>	<b>0.68</b>	<b>0.83</b>	
Pioneer® 43Y92 CL		119	133	114	
Saintly CL	132	121		112	
Pioneer® 44Y90 CL	124	119	111	111	
Banker CL	125	120	91	106	
Pioneer® 45Y91 CL		112	92	103	
VICTORY® V75-03CL				95	
Hyola® 575CL	87	88	84	89	
<b>Sowing date</b>	<b>1 May</b>	<b>29 Apr</b>	<b>4 May</b>	<b>23 May</b>	<b>2 May</b>
<b>Rainfall J–M (mm)</b>	<b>129</b>	<b>167</b>	<b>136</b>	<b>43</b>	<b>157</b>
<b>Rainfall A–O (mm)</b>	<b>353</b>	<b>654</b>	<b>150</b>	<b>223</b>	<b>130</b>

For more information click this [LINK](#)

**TABLE 5 Condobolin early season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>		<b>2.39</b>		<b>0.52</b>	<b>1.19</b>
Saintly CL	Trial failed		Trial failed		108
Pioneer® 44Y90 CL		106		115	110
Pioneer® 43Y92 CL		105		123	107
Hyola® 575CL		95		102	86
VICTORY® V7002CL				106	95
<b>Sowing date</b>	<b>29 Apr</b>	<b>4 May</b>	<b>1 May</b>	<b>9 May</b>	<b>24 Apr</b>
<b>Rainfall J–M (mm)</b>	<b>95</b>	<b>103</b>	<b>204</b>	<b>38</b>	<b>68</b>
<b>Rainfall A–O (mm)</b>	<b>263</b>	<b>481</b>	<b>151</b>	<b>91</b>	<b>69</b>

For more information click this [LINK](#)**TABLE 6 Trangie early season CL canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>2.61</b>	<b>1.59</b>	<b>0.76</b>		
Pioneer® 44Y90 CL	106	109	108	No trial	Trial failed
Pioneer® 43Y92 CL		106	107		
Saintly CL	106		102		
Banker CL	100	118	84		
VICTORY® V7002CL			113		
Hyola® 575CL	96	88	87		
<b>Sowing date</b>	<b>28 Apr</b>	<b>28 Apr</b>	<b>4 May</b>		<b>1 May</b>
<b>Rainfall J–M (mm)</b>	<b>71</b>	<b>96</b>	<b>107</b>		<b>92</b>
<b>Rainfall A–O (mm)</b>	<b>314</b>	<b>531</b>	<b>144</b>		<b>45</b>

For more information click this [LINK](#)**TABLE 7 Grenfell mid-season RR canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>2.98</b>	<b>2.75</b>	<b>0.69</b>		
Xseed™ Raptor			111	Trial failed	Trial failed
Nuseed GT-53	106	109	103		
InVigor® R 5520P	102	102	109		
Hyola® 410XX			108		
Hyola® 506RR		100	106		
DG 460RR	100	97	90		
Hyola® 600RR	99	98	82		
Nuseed GT-42	97	97	94		
Hyola® 540XC			80		
VICTORY® V5003RR	96	91	78		
<b>Sowing date</b>	<b>23 Apr</b>	<b>6 May</b>	<b>12 May</b>	<b>9 May</b>	<b>7 May</b>
<b>Rainfall J–M (mm)</b>	<b>143</b>	<b>85</b>	<b>116</b>	<b>71</b>	<b>145</b>
<b>Rainfall A–O (mm)</b>	<b>430</b>	<b>723</b>	<b>241</b>	<b>174</b>	<b>127</b>

For more information click this [LINK](#)**TABLE 8 Parkes mid-season RR canola.**

Year	2015	2016	2017	2018	2019
<b>Mean yield (t/ha)</b>	<b>1.76</b>	<b>2.51</b>	<b>1.33</b>		
Pioneer® 44Y27 RR		109	117	Trial failed	Trial failed
Pioneer® 45Y28 RR			108		
Pioneer® 43Y29 RR			105		
Nuseed GT-53	107	105	113		
DG 408RR		104	110		
Hyola® 506RR			108		
InVigor® R 5520P	101	103	97		
Pioneer® 45Y25 RR	100	103	92		
Nuseed GT-42	99	97	102		
Hyola® 404RR	98	95	106		
<b>Sowing date</b>	<b>29 Apr</b>	<b>7 May</b>	<b>2 May</b>	<b>3 May</b>	<b>9 May</b>
<b>Rainfall J–M (mm)</b>	<b>51</b>	<b>102</b>	<b>219</b>	<b>62</b>	<b>98</b>
<b>Rainfall A–O (mm)</b>	<b>326</b>	<b>679</b>	<b>153</b>	<b>127</b>	<b>114</b>

For more information click this [LINK](#)

**TABLE 9 Condobolin early season RR canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.39		0.52	1.19
Pioneer® 43Y29 RR	Trial failed		Trial failed		110
InVigor® R 4022P					117
Pioneer® 44Y27 RR		105			114
DG 408RR				109	107
Hyola® 410XX					103
InVigor® R 3520		94		90	108
Hyola® 404RR		90		103	94
Sowing date	29 Apr	4 May	1 May	9 May	24 Apr
Rainfall J–M (mm)	95	103	204	38	68
Rainfall A–O (mm)	263	481	151	91	69

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.61	1.59	0.76		
Pioneer® 44Y27 RR		111	116	No trial	Trial failed
Pioneer® 43Y29 RR			85		
DG 408RR		102	115		
InVigor® R 3520		102	117		
Pioneer® 43Y23 RR	102	96	116		
Hyola® 404RR	100	90	104		
Nuseed GT-42	99	92	87		
Sowing date	28 Apr	28 Apr	4 May		1 May
Rainfall J–M (mm)	71	96	107		92
Rainfall A–O (mm)	314	531	144		45

For more information click this [LINK](#)**TABLE 11 Cudal mid-season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.18	2.73	0.83	0.82	0.66
HyITec® Trident				174	149
HyITec® Trifecta					152
HyITec® Trophy			134	142	139
InVigor® T 4510		118	124	119	145
Hyola® 550TT				126	138
SF Ignite TT		111	111	111	97
Hyola® 350TT				112	138
DG 670TT		111		103	111
SF Turbine TT	106	108	113	112	123
SF Spark TT					111
Sowing date	24 Apr	6 May	4 May	2 May	1 May
Rainfall J–M (mm)	97	103	192	87	136
Rainfall A–O (mm)	305	644	162	153	130

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.98	2.75	0.69	0.47	
HyITec® Trifecta				149	Trial failed
HyITec® Trident				156	
HyITec® Trophy			127	141	
InVigor® T 4510		119	130	132	
SF Ignite TT		116	100	113	
DG 670TT		114		114	
Hyola® 350TT		109	124	121	
Hyola® 550TT				126	
SF Turbine TT	105	109	115	117	
Hyola® 650TT	107	108	95	114	
Sowing date	23 Apr	6 May	12 May	9 May	7 May
Rainfall J–M (mm)	143	85	116	71	145
Rainfall A–O (mm)	430	723	241	174	127

For more information click this [LINK](#)

**TABLE 13 Parkes mid-season TT canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.76	2.51	1.33		
HyTTec® Trophy			125	Trial failed	Trial failed
InVigor® T 4510		116	120		
Hyola® 350TT			119		
Pioneer® 44T02 TT	111	106	124		
Hyola® 559TT	110	106	122		
SF Turbine TT	108	108	112		
Hyola® 580CT			97		
ATR Mako <sup>db</sup>	95	95	94		
ATR Bonito <sup>db</sup>	94	96	89		
ATR Wahoo <sup>db</sup>	90	94	76		
Sowing date	29 Apr	7 May	2 May	3 May	9 May
Rainfall J–M (mm)	51	102	219	62	98
Rainfall A–O (mm)	326	679	153	127	114

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.58	2.32	0.68	0.83	
HyTTec® Trifecta				127	Trial failed
InVigor® T 4510		125	126	119	
HyTTec® Trophy			130	122	
InVigor® T 3510				111	
DG 670TT		121		108	
Hyola® 350TT				112	
Hyola® 550TT				114	
SF Ignite TT		119	83	107	
SF Turbine TT	113	110	116	109	
Pioneer® 45T03 TT				99	
Sowing date	1 May	29 Apr	4 May	23 May	2 May
Rainfall J–M (mm)	129	167	136	43	157
Rainfall A–O (mm)	353	654	150	223	130

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.39		0.52	1.19
InVigor® T 4510	Trial failed	111	Trial failed	115	117
InVigor® T 3510				109	112
Pioneer® 44T02 TT		99		106	112
Monola® 416TT		109		103	93
Hyola® 350TT				108	114
HyTTec® Trident				123	120
Hyola® 550TT					115
SF Spark TT					103
ATR Bonito <sup>db</sup>		100		107	91
ATR-Stingray <sup>db</sup>				94	88
Sowing date	29 Apr	4 May	1 May	9 May	24 Apr
Rainfall J–M (mm)	95	103	204	38	68
Rainfall A–O (mm)	263	481	151	91	69

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

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.61	1.59	0.76		
HyTTec® Trident			145	No trial	Trial failed
InVigor® T 4510		116	113		
HyTTec® Trophy			113		
Hyola® 350TT			126		
Hyola® 559TT	106	110	114		
Pioneer® 44T02 TT	105	106	118		
SF Turbine TT	102	110	102		
BASF 3000 TR	100	93	115		
Monola® 416TT	98	101	80		
ATR Bonito <sup>db</sup>	99	94	88		
Sowing date	28 Apr	28 Apr	4 May		1 May
Rainfall J–M (mm)	71	96	107		92
Rainfall A–O (mm)	314	531	144		45

For more information click this [LINK](#)



**TABLE 17 Grenfell mid conventional canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.98	2.75	0.69		
Nuseed® Quartz		115	119	Trial failed	Trial failed
Nuseed® Diamond	95	100	126		
AV-Garnet <sup>®</sup>	96	90	75		
Victory® V3002	93	89	77		
Sowing date	23 Apr	6 May	12 May	9 May	7 May
Rainfall J–M (mm)	143	33	57	71	11
Rainfall A–O (mm)	430	402	258	174	379

For more information click this [LINK](#)

**TABLE 18 Condobolin early conventional canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)		2.39		0.52	1.19
Nuseed® Quartz	Trial failed	104	Trial failed	113	115
Nuseed® Diamond		97		106	119
AV-Garnet <sup>®</sup>		102		74	82
Sowing date	29 Apr	4 May	1 May	9 May	24 Apr
Rainfall J–M (mm)	95	103	204	38	68
Rainfall A–O (mm)	263	481	151	91	69

For more information click this [LINK](#)

**TABLE 19 Trangie early conventional canola.**

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	2.61	1.59	0.76		
Hyola® 50			127	No trial	Trial failed
Nuseed® Diamond	108	110	131		
Nuseed® Quartz		111	117		
Victory® V3002	93	81	87		
AV-Garnet <sup>®</sup>	88	92	70		
Sowing date	28 Apr	28 Apr	4 May		1 May
Rainfall J–M (mm)	71	96	107		92
Rainfall A–O (mm)	314	531	144		45

For more information click this [LINK](#)

## CANOLA VARIETY DISEASE RATINGS – NEW SOUTH WALES

The following table contains varietal ratings for the predominant diseases of canola in New South Wales.

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

**TABLE 20 Canola disease guide for New South Wales.**

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

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 20 Canola disease guide for New South Wales (continued).**

Variety	2020 autumn Blackleg rating				Type
	Bare	Jockey®	ILeVO®	Saltro®	
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
VICTORY® V5003RR	R-MR	R	R	R	High stability oil, hybrid
ROUNDUP READY® AND TRIAZINE-TOLERANT VARIETIES					
BASF 3000 TR	MS-S	MR	R	R	Hybrid
TRUFLEX® HYBRID VARIETIES					
Hyola® 410XX	R-MR			R	Hybrid
InVigor® R 4022P	MR		R		Hybrid
Xseed™ Raptor	R				Hybrid
TRUFLEX® AND CLEARFIELD® VARIETIES					
Hyola® 540XC	R				Hybrid
TRUFLEX®AND TRIAZINE-TOLERANT VARIETIES					
Hyola® 530XT	MR				Hybrid

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

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

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

# CHICKPEA

## CHICKPEA VARIETY YIELD PERFORMANCE – CENTRAL NEW SOUTH WALES

The following table contains yield results from the top-performing varieties within each NVT location in Central New South Wales 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 links 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 Winter Crop Variety Sowing Guide for New South Wales* for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide).

**TABLE 1** Trangie desi chickpea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	1.25			0.89	
PBA Drummond <sup>Ⓛ</sup>		No trial	No trial	109	Trial failed
PBA Boundary <sup>Ⓛ</sup>	101			106	
Kyabra <sup>Ⓛ</sup>	98			108	
PBA Seamer <sup>Ⓛ</sup>	102			97	
Jimbour	96			104	
PBA HatTrick <sup>Ⓛ</sup>	95			99	
Sowing date	18 May			19 Jun	12 Jun
Rainfall J–M (mm)	71			47	92
Rainfall A–O (mm)	314			137	45

For more information click this [LINK](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

## CHICKPEA VARIETY DISEASE RATINGS – NEW SOUTH WALES

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

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

**TABLE 2 Chickpea disease guide for New South Wales.**

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

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant, <sub>p</sub> = provisional rating, / indicates pathotype differences.

# FIELD PEA

## FIELD PEA VARIETY YIELD PERFORMANCE – CENTRAL NEW SOUTH WALES

The following table contains yield results from the top-performing varieties within each NVT location in Central New South Wales 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 links 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 Winter Crop Variety Sowing Guide for New South Wales* for further information at [grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide](http://grdc.com.au/new-south-wales-winter-crop-variety-sowing-guide).

**TABLE 1** Condobolin field pea.

Year	2015	2016	2017	2018	2019
Mean yield (t/ha)	0.45	1.79			0.62
PBA Pearl <sup>Ⓟ</sup>	149	138	Trial failed	Trial failed	98
Sturt	131	119			90
PBA Butler <sup>Ⓟ</sup>		121			97
PBA Oura <sup>Ⓟ</sup>	139	105			94
PBA Percy <sup>Ⓟ</sup>	151	93			92
PBA Wharton <sup>Ⓟ</sup>	120	80			107
Kaspa <sup>Ⓟ</sup>	73	101			79
Morgan <sup>Ⓟ</sup>	83	85			85
Sowing date	26 May	18 May	15 May	13 Jun	22 May
Rainfall J–M (mm)	95	103	204	38	68
Rainfall A–O (mm)	263	481	151	91	69

For more information click this [LINK](#)

WHEAT

BARLEY

OAT

CANOLA

CHICKPEA

FIELD PEA

## FIELD PEA VARIETY DISEASE RATINGS – NEW SOUTH WALES

The following table contains varietal ratings for the predominant diseases of field pea in New South Wales. These ratings are updated annually by crop

pathologists and were released in March 2020. Selected varieties of most relevance to New South Wales growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**TABLE 2 Field pea disease guide for New South Wales.**

Variety	Bacterial blight	Downy mildew	Powdery mildew	Blackspot (Ascochyta blight)
Kaspa <sup>Ⓛ</sup>	S	S	S	MS
PBA Butler <sup>Ⓛ</sup>	MS	S	S	MS
PBA Gunyah <sup>Ⓛ</sup>	S	S	S	MS
PBA Oura <sup>Ⓛ</sup>	MS	S	S	MS
PBA Pearl <sup>Ⓛ</sup>	MS	S	S	MS
PBA Percy <sup>Ⓛ</sup>	MRMS	S	S	MS
PBA Twilight <sup>Ⓛ</sup>	S	S	S	MS
PBA Wharton <sup>Ⓛ</sup>	S	S	R	MS
Sturt	S	S	S	MS

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



# USEFUL LINKS AND FURTHER INFORMATION

## NVT Harvest Reports for all regions

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

## Variety Central

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

## NVT Overview Podcast (1 November 2018)

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

## NVT Overview Video (29 October 2019)

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

## NVT Northern Region (29 October 2019)

[youtu.be/JapJ7lbHotE](https://youtu.be/JapJ7lbHotE)

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

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

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

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