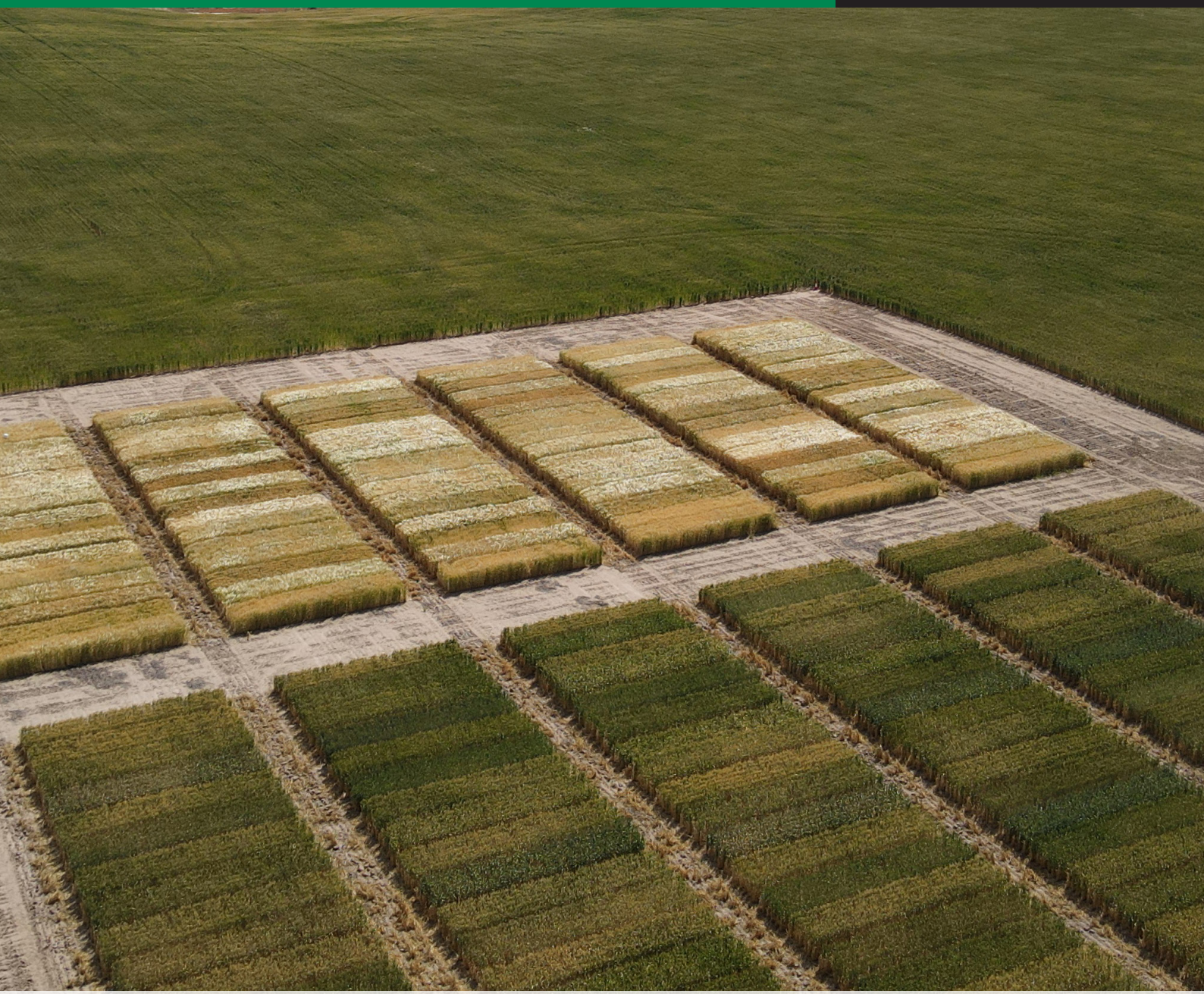
NVT
HARVEST REPORT

GRDC NATIONAL VARIETY TRIALS™

REVISED APRIL 2023



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COVER: NVT barley and wheat, Lake Grace, WA in 2022.
PHOTO: Isabelle Rogers

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LEGEND: MEAN VARIETY YIELD PERFORMANCE

LOW **HIGH**

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

DISEASE RATING COLOUR RANGE

VS	SVS	S	MSS	MS	MRMS	MR	RMR	R

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

The disease ratings in the report are current at the time of publication.
Regularly visit nvt.grdc.com.au/nvt-disease-ratings to find the latest NVT disease ratings.

Refer to the latest *Crop Sowing Guide* for further information at
grdc.com.au/nvt-crop-sowing-guides

INTRODUCTION

This ***NVT Harvest Report*** provides information to support growers and advisers with decisions on variety selection for **Northern 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 2022 and long-term yield performance of varieties of crop species suitable for production in **Northern New South Wales** together with their quality and disease responses.

The NVT program provides growers and advisers with comparative results 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.

Interpreting long-term yield results

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 results 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 **Northern New South Wales** Harvest Report, results are presented in year groupings for yield for the past five years and quality for the past two years. Further detailed interrogation of the NVT Online results using the Long Term Yield Reporter will provide more specific performance results on all varieties of each crop species in each NVT location throughout **Northern New South Wales**.

The results presented in this Harvest Report are based on the default filters in the Long Term Yield Reporter. In some cases, trial results are excluded because they do not meet the default standards for statistical validity. These are listed in the tables as 'Trial results below standard'. Trials below standard can be viewed by reducing the default VAF settings within the Long Term Yield Reporter.

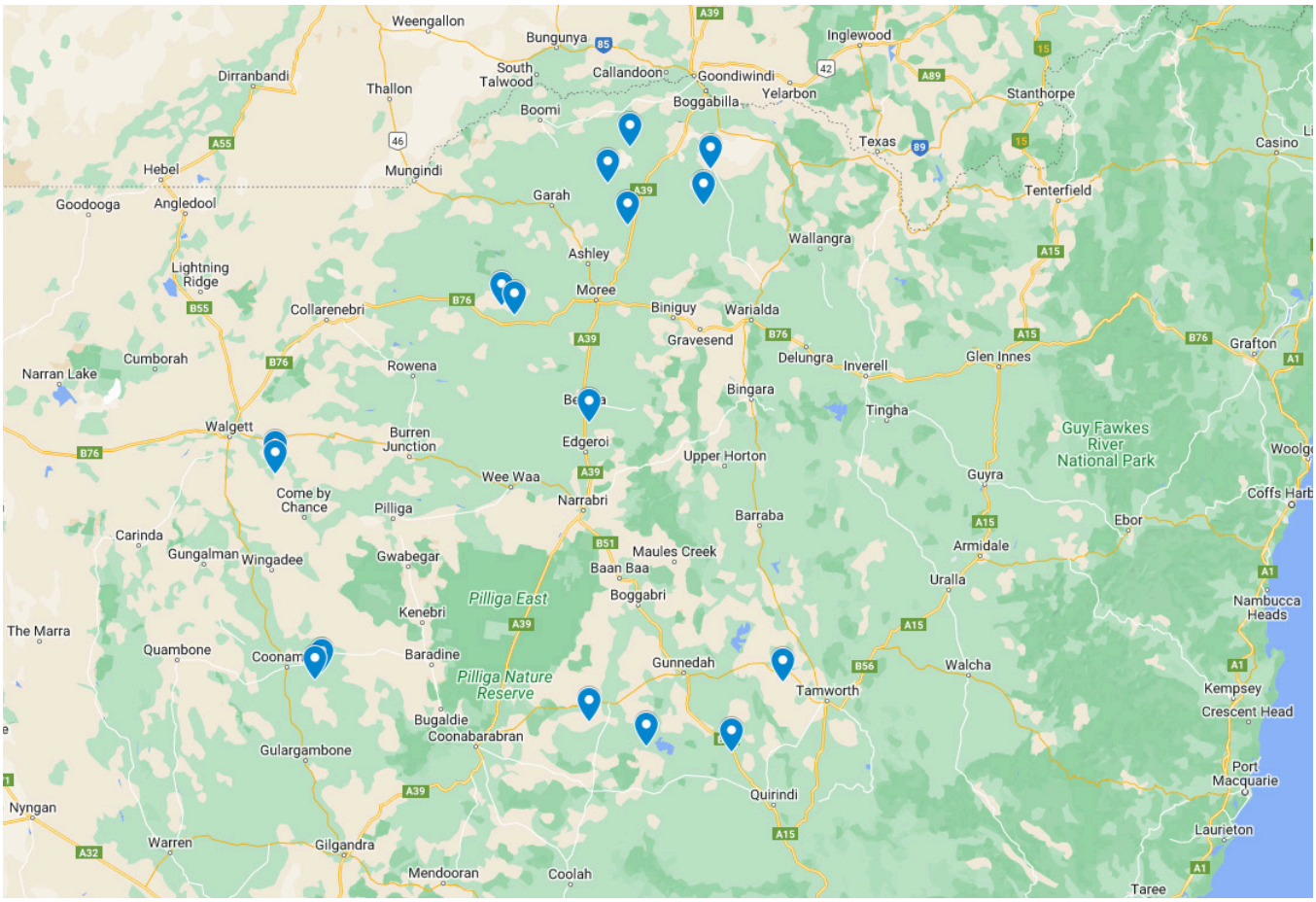
Trials listed as compromised are not suitable for making variety decisions. Results can be found in the Quarantined trial reports.

Refer to the latest ***Crop Sowing Guide*** for further information at **grdc.com.au/nvt-crop-sowing-guides**

NVT SITE LOCATIONS – Northern New South Wales

Figure 1: Locality of NVT trial sites in Northern New South Wales from 2018 to 2022.

SOURCE: NVT Online



See all NVT trial locations and view trial results at nvt.grdc.com.au/trial-results.

WHEAT

New wheat varieties

The following information is for wheat varieties released in the 12 months to the date when the MET analysis was published on NVT online.

Variety	Variety owner	Grain classification	End point royalty* ($)	Comments supplied by variety owner
Brumby(Φ)	InterGrain	Milling	3.50	Mid-maturing, with a slightly later time of flowering than Scepter(Φ), although earlier than RockStar(Φ). Well-suited to May sowing.
Jillaroo(Φ)	InterGrain	Milling	3.50	Exceptionally high-yielding, quick-maturity spring wheat suited to mid-May onwards sowing with moderate, compact plant height.
LRPB Scotch(Φ)	LongReach Plant Breeders Pty Ltd	Milling	None provided.	Mid-slow spring maturing suited for high-yielding soft wheat production systems. Medium-short height with good straw strength well-suited for irrigated production.
Rebel 65	Rebel Seeds	Milling	None provided.	None provided.
Rebel Rat	Rebel Seeds	Feed	None provided.	A mid-maturity variety similar to Borlaug 100(Φ). Upright, grows to about a metre, strong resistance to lodging. Replacement for crown rot susceptible varieties. Large seed, high starch suitable for livestock processing.

* EPR amount is ex-GST, (Φ) denotes Plant Breeder's Rights apply.

Refer to the latest *Crop Sowing Guide* for further information at grdc.com.au/nvt-crop-sowing-guides

Wheat variety yield performance – Northern New South Wales

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are 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 Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Bellata main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.42		4.38	5.50	
Catapult[Φ]		Compromised trial		105	Compromised trial
Calibre[Φ]				109	
LRPB Scotch[Φ]				109	
Scepter[Φ]	110		107	109	
Jillaroo[Φ]				107	
Sunmaster[Φ]			105	111	
LRPB Raider[Φ]			112	103	
Beckom[Φ]	105		104	110	
Coota[Φ]			106	104	
Boree[Φ]			111	103	
IMI-TOLERANT					
Sunblade CL Plus[Φ]			105	113	
Elmore CL Plus[Φ]	97		93	99	
Sowing date	4 Jun	22 Jul	18 May	21 May	25 May
Rainfall J–M (mm)	91	67	337	377	274
Rainfall A–O (mm)	108	81	235	372	589

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 2: Bullarah main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			3.37	5.45	
Sunmaster[Φ]	Trial failed	Trial failed	107	117	Compromised trial
LRPB Raider[Φ]			103	114	
Suncentral[Φ]			105	110	
Calibre[Φ]				108	
Rebel Rat			103	111	
Borlaug 100[Φ]			103	108	
LRPB Reliant[Φ]			101	109	
Beckom[Φ]			104	107	
Catapult[Φ]			106	104	
Scepter[Φ]			106	104	
IMI-TOLERANT					
Sunblade CL Plus[Φ]			107	115	
Elmore CL Plus[Φ]			94	90	
Sowing date	14 Jun	24 May	14 May	11 May	16 Jun
Rainfall J–M (mm)	203	50	469	422	216
Rainfall A–O (mm)	105	24	73	253	390

Special thanks to 2022 trial cooperator, Rimanui Farms.
Learn more via the NVT Long Term Yield Reporter

Table 3: Coonamble main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		0.70	4.38		6.53
Calibre[Φ]	Trial failed			Trial failed	106
LRPB Scotch[Φ]					109
Scepter[Φ]		129	117		105
Catapult[Φ]		136	127		96
Beckom[Φ]		117	112		108
Sunmaster[Φ]			105		113
Boree[Φ]			114		104
Jillaroo[Φ]					96
Coolah[Φ]		121	118		101
Vixen[Φ]		134	112		101
IMI-TOLERANT					
Sunblade CL Plus[Φ]		118	115		108
Elmore CL Plus[Φ]		103	104		91
Sowing date	20 Jun	20 May	12 May	14 May	27 May
Rainfall J–M (mm)	77	155	248	224	147
Rainfall A–O (mm)	105	54	230	267	583

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 4: North Star main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.05	0.71	3.09	5.74	5.04
Sunmaster[Φ]			108	119	131
Suncentral[Φ]		112	106	114	124
Borlaug 100[Φ]	102	96	108	106	125
Rebel Rat			106	107	123
LRPB Oryx[Φ]			104	110	113
Beckom[Φ]	107	115	104	111	109
Brumby[Φ]					108
Sunchaser[Φ]	97	112	103	101	119
Suntop[Φ]	99	115	103	102	115
Condo[Φ]	90	109	102	105	115
IMI-TOLERANT					
Sunblade CL Plus[Φ]		118	107	114	119
Elmore CL Plus[Φ]	97	112	97	89	91
Sowing date	13 Jun	14 May	11 May	4 May	10 May
Rainfall J–M (mm)	96	97	238	419	215
Rainfall A–O (mm)	136	48	237	274	475

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 5: Spring Ridge main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			3.93	4.68	
Catapult(Ф)	Trial failed	Trial failed		119	Compromised trial
Scepter(Ф)			107	114	
Jillaroo(Ф)				113	
Calibre(Ф)				109	
Vixen(Ф)			102	116	
Boree(Ф)			100	117	
Coota(Ф)			103	114	
LRPB Scotch(Ф)				112	
Sunmaster(Ф)			112	105	
Beckom(Ф)			106	110	
IMI-TOLERANT					
Sunblade CL Plus(Ф)			111	110	
Elmore CL Plus(Ф)			94	100	
Sowing date	**25 Jun**	**18 Jun**	**1 Jun**	**1 Jun**	**24 May**
Rainfall J–M (mm)	**125**	**141**	**338**	**331**	**317**
Rainfall A–O (mm)	**217**	**112**	**392**	**286**	**628**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT ong Term Yield Reporter

Table 6: Tulloona main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		2.00	3.24	5.34	4.74
Sunmaster(Ф)	Trial failed		107	116	128
Suncentral(Ф)		105	105	111	121
Borlaug 100(Ф)		112	104	108	120
Rebel Rat			103	110	120
SEA Condamine		110	101	104	114
Brumby(Ф)					106
Sunchaser(Ф)		100	101	102	119
Beckom(Ф)		101	104	109	108
LRPB Scotch(Ф)					108
Suntop(Ф)		99	101	102	115
IMI-TOLERANT					
Sunblade CL Plus(Ф)		106	107	114	118
Elmore CL Plus(Ф)		92	95	91	93
Sowing date	**24 May**	**14 May**	**12 May**	**11 May**	**10 May**
Rainfall J–M (mm)	**96**	**97**	**263**	**419**	**215**
Rainfall A–O (mm)	**136**	**48**	**193**	**274**	**475**

Special thanks to 2022 trial cooperator, MCA Agronomy P/L.
Learn more via the NVT Long Term Yield Reporter

Table 7: Walgett main season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			4.06	6.19	5.49
Borlaug 100(Ф)	Compromised trial	No trial	106	108	120
Sunmaster(Ф)			107	108	117
Calibre(Ф)				109	111
Rebel Rat			102	109	118
Brumby(Ф)					110
Suncentral(Ф)			106	106	116
SEA Condamine			102	108	115
Vixen(Ф)			118	101	109
Boree(Ф)			110	105	109
Scepter(Ф)			110	105	108
IMI-TOLERANT					
Sunblade CL Plus(Ф)			107	106	110
Elmore CL Plus(Ф)			94	91	86
Sowing date	**15 May**		**13 May**	**13 May**	**15 Jun**
Rainfall J–M (mm)	**51**		**248**	**272**	**231**
Rainfall A–O (mm)	**100**		**223**	**215**	**449**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 8: Bellata early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.86	1.12	4.65	5.47	4.33
RGT Zanzibar	94	73	98	107	130
LRPB Raider(Ф)			114	101	113
Coota(Ф)		118	114	105	91
RockStar(Ф)			112	108	79
Catapult(Ф)				106	74
Sunflex(Ф)	104	112	110		96
LRPB Scotch(Ф)					130
Coolah(Ф)	105	117	110	102	91
LRPB Nighthawk(Ф)	91	47	99	100	128
LRPB Stealth(Ф)		120	107	101	89
IMI-TOLERANT					
Valiant(Ф) CL Plus				104	70
Sowing date	**16 May**	**7 May**	**28 Apr**	**29 Apr**	**4 May**
Rainfall J–M (mm)	**91**	**67**	**337**	**377**	**274**
Rainfall A–O (mm)	**108**	**81**	**235**	**372**	**589**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 9: Bullarah early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			3.32	5.59	3.95
LRPB Raider$^{\phi}$	Trial failed	Trial failed	127	111	102
Coota$^{\phi}$			121	110	105
LRPB Scotch$^{\phi}$					111
Catapult$^{\phi}$			125	110	99
RockStar$^{\phi}$			117	110	105
Sunflex$^{\phi}$			115		104
Coolah$^{\phi}$			120	107	97
Sunmax$^{\phi}$			112	103	104
LRPB Stealth$^{\phi}$			116	105	95
LRPB Nighthawk$^{\phi}$			93	100	112
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus				95	100
Sowing date	**26 Apr**	**24 May**	**28 Apr**	**20 Apr**	**30 Apr**
Rainfall J–M (mm)	**203**	**50**	**469**	**422**	**216**
Rainfall A–O (mm)	**105**	**24**	**73**	**253**	**390**

Special thanks to 2022 trial cooperator, Rimanui Farms.
Learn more via the NVT Long Term Yield Reporter

Table 10: Coonamble early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		0.69			5.77
RockStar$^{\phi}$	Trial failed		Compromised trial	Trial failed	108
Catapult$^{\phi}$		167			104
Coota$^{\phi}$		122			106
Sunflex$^{\phi}$		117			104
Coolah$^{\phi}$		121			100
LRPB Lancer$^{\phi}$		125			99
LRPB Stealth$^{\phi}$		123			98
LRPB Nighthawk$^{\phi}$		35			106
LRPB Scotch$^{\phi}$					105
Sunmax$^{\phi}$		62			101
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus					104
Sowing date	**7 May**	**23 Apr**	**24 Apr**	**23 Apr**	**22 Apr**
Rainfall J–M (mm)	**77**	**155**	**248**	**224**	**147**
Rainfall A–O (mm)	**105**	**54**	**230**	**267**	**583**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 11: North Star early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.20	0.87	2.68	5.06	4.36
LRPB Raider$^{\phi}$			137	111	106
Catapult$^{\phi}$				114	81
Coolah$^{\phi}$	110	105	130	109	95
LRPB Reliant$^{\phi}$		99	130	97	109
LRPB Flanker$^{\phi}$	108	102	127	99	108
RGT Zanzibar	100	52	97	107	128
Sunflex$^{\phi}$	107	102	121		96
EGA Gregory$^{\phi}$	110	91	127	99	105
DS Faraday$^{\phi}$	114	68	128	98	108
LRPB Stealth$^{\phi}$		114	124	106	95
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus				97	80
Sowing date	**8 May**	**30 Apr**	**27 Apr**	**21 Apr**	**28 Apr**
Rainfall J–M (mm)	**96**	**97**	**238**	**419**	**215**
Rainfall A–O (mm)	**136**	**48**	**237**	**274**	**475**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 12: Spring Ridge early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			4.12	5.02	3.87
RGT Zanzibar	Trial failed	Trial failed	93	114	129
RockStar$^{\phi}$			119	112	98
Catapult$^{\phi}$				109	95
Coota$^{\phi}$			115	109	95
Sunflex$^{\phi}$			109		101
Coolah$^{\phi}$			107	104	99
Severn$^{\phi}$				107	100
LRPB Raider$^{\phi}$			102	104	101
LRPB Stealth$^{\phi}$			106	101	99
LRPB Scotch$^{\phi}$					109
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus				102	96
Sowing date	**25 Jun**	**18 Jun**	**28 Apr**	**19 May**	**10 May**
Rainfall J–M (mm)	**125**	**141**	**338**	**331**	**317**
Rainfall A–O (mm)	**217**	**112**	**392**	**286**	**628**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 13: Tulloona early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		1.92	2.83	5.14	4.76
Catapult$^{\phi}$	Trial failed	140	136	109	83
RockStar$^{\phi}$			125	114	84
Coota$^{\phi}$		118	131	109	91
LRPB Raider$^{\phi}$			144	96	108
Sunflex$^{\phi}$		108	125		96
Coolah$^{\phi}$		114	131	100	95
LRPB Stealth$^{\phi}$		115	123	99	95
Sunmax$^{\phi}$		97	112	100	99
EG Titanium		121	114	93	93
LRPB Lancer$^{\phi}$		117	101	101	93
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus				113	80
Sowing date	**20 Apr**	**23 Apr**	**27 Apr**	**28 Apr**	**29 Apr**
Rainfall J–M (mm)	**96**	**97**	**263**	**419**	**215**
Rainfall A–O (mm)	**136**	**48**	**193**	**274**	**475**

Special thanks to 2022 trial cooperator, MCA Agronomy P/L.
Learn more via the NVT Long Term Yield Reporter

Table 14: Walgett early season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.85		3.67	6.20	5.49
Catapult$^{\phi}$		No trial	144	107	101
RockStar$^{\phi}$			133	108	105
Coota$^{\phi}$			126	108	99
Sunflex$^{\phi}$	105		121		104
Coolah$^{\phi}$	107		128	103	100
LRPB Stealth$^{\phi}$			125	102	100
LRPB Raider$^{\phi}$			120	106	99
LRPB Lancer$^{\phi}$	107		109	99	97
LRPB Flanker$^{\phi}$	99		121	92	100
EG Titanium	108		119	97	90
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus				99	103
Sowing date	**15 May**		**24 Apr**	**24 Apr**	**21 Apr**
Rainfall J–M (mm)	**51**		**248**	**272**	**231**
Rainfall A–O (mm)	**100**		**223**	**215**	**449**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 15: Somerton long season wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			4.33	3.95	4.42
Anapurna	Compromised trial	Trial failed	110	105	122
Illabo$^{\phi}$			109	125	103
BigRed$^{\phi}$				99	124
LRPB Beaufort$^{\phi}$			106	124	102
LRPB Nighthawk$^{\phi}$			108	116	105
Severn$^{\phi}$				113	106
RGT Zanzibar			102	120	99
Longsword$^{\phi}$			108	119	93
Sunmax$^{\phi}$			106	106	105
LRPB Kittyhawk$^{\phi}$			106	105	99
IMI-TOLERANT					
Valiant$^{\phi}$ CL Plus				119	98
Sowing date	**30 Apr**	**9 Apr**	**20 Apr**	**21 Apr**	**12 Apr**
Rainfall J–M (mm)	**103**	**91**	**299**	**274**	**273**
Rainfall A–O (mm)	**154**	**70**	**367**	**327**	**516**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 16: Bellata durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.10		4.12	5.00	4.42
Westcourt$^{\phi}$	111	Compromised trial	107	108	110
Bitalli$^{\phi}$				105	113
DBA Mataroi$^{\phi}$	105		102	105	112
Caparoi$^{\phi}$	106		102	105	93
DBA-Aurora$^{\phi}$	97		106	94	103
DBA Bindaroi$^{\phi}$	103		105	100	92
DBA Vittaroi$^{\phi}$	97		97	98	98
DBA-Artemis$^{\phi}$				91	94
DBA Lillaroi$^{\phi}$	99		92	103	91
DBA Spes$^{\phi}$			102		95
Sowing date	**4 Jun**	**22 Jul**	**18 May**	**21 May**	**25 May**
Rainfall J–M (mm)	**91**	**67**	**337**	**377**	**274**
Rainfall A–O (mm)	**108**	**81**	**235**	**372**	**589**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 17: Bullarah durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			2.81	4.42	3.33
Westcourt(P)	Trial failed	Trial failed	107	114	108
Bitalli(P)				112	109
DBA Mataroi(P)			106	107	110
DBA-Aurora(P)			106	114	95
DBA-Artemis(P)				113	88
DBA Bindaroi(P)			99	105	94
DBA Spes(P)			101		91
Caparoi(P)			97	97	99
DBA Vittaroi(P)			98	95	98
DBA Lillaroi(P)			91	79	100
Sowing date	14 Jun	24 May	14 May	11 May	16 Jun
Rainfall J–M (mm)	203	50	469	422	216
Rainfall A–O (mm)	105	24	73	253	390

Special thanks to 2022 trial cooperator, Rimanui Farms.
Learn more via the NVT Long Term Yield Reporter

Table 18: Coonamble durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		0.27			5.81
Bitalli(P)	Trial failed	105	Compromised trial	Trial failed	110
DBA Mataroi(P)		100			110
Westcourt(P)		124			107
DBA-Aurora(P)		98			101
DBA Vittaroi(P)		92			98
DBA Spes(P)					96
Caparoi(P)		127			94
DBA-Artemis(P)					94
DBA Lillaroi(P)		97			94
DBA Bindaroi(P)		126			92
Sowing date	20 Jun	20 May	12 May	14 May	27 May
Rainfall J–M (mm)	77	155	248	224	147
Rainfall A–O (mm)	105	54	230	267	583

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 19: North Star durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	2.32	1.05		5.43	4.95
Bitalli(P)		107	Trial failed	110	112
DBA-Aurora(P)	103	110		111	108
DBA Mataroi(P)	105	104		108	111
Westcourt(P)	108	108		108	107
DBA-Artemis(P)				107	99
DBA Spes(P)					101
DBA Vittaroi(P)	98	97		97	98
DBA Bindaroi(P)	101	104		97	92
Caparoi(P)	101	98		92	89
DBA Lillaroi(P)	94	86		84	87
Sowing date	13 Jun	14 May	11 May	4 May	10 May
Rainfall J–M (mm)	96	97	238	419	215
Rainfall A–O (mm)	136	48	237	274	475

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 20: Spring Ridge durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			3.96	4.26	2.96
Westcourt(P)	Trial failed	Trial failed	105	111	104
Bitalli(P)				104	109
DBA Mataroi(P)			104	102	108
Caparoi(P)			101	110	89
DBA-Aurora(P)			98	98	107
DBA Bindaroi(P)			98	108	92
DBA Vittaroi(P)			99	97	99
DBA-Artemis(P)				100	100
DBA Spes(P)			95		103
DBA Lillaroi(P)			100	99	89
Sowing date	25 Jun	18 Jun	1 Jun	1 Jun	24 May
Rainfall J–M (mm)	125	141	338	331	317
Rainfall A–O (mm)	217	112	392	286	628

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 21: Tulloona durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		1.81	2.92	5.13	4.84
Westcourt(P)	Trial failed	107	106	112	105
Bitalli(P)		104		109	108
DBA Mataroi(P)		102	105	106	108
DBA-Aurora(P)		104	102	105	104
DBA-Artemis(P)				103	98
DBA Bindaroi(P)		104	99	103	94
DBA Spes(P)			98		100
Caparoi(P)		102	99	102	93
DBA Vittaroi(P)		98	98	96	99
DBA Lillaroi(P)		93	95	90	92
Sowing date	24 May	14 May	12 May	11 May	10 May
Rainfall J–M (mm)	96	97	263	419	215
Rainfall A–O (mm)	136	48	193	274	475

Special thanks to 2022 trial cooperator, MCA Agronomy P/L.
Learn more via the NVT Long Term Yield Reporter

Table 22: Walgett durum wheat.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			3.33	6.58	4.96
Bitalli(P)	Compromised trial	No trial		104	114
DBA Mataroi(P)			106	102	115
Westcourt(P)			111	101	112
DBA-Aurora(P)			103	109	96
DBA-Artemis(P)				107	86
DBA Spes(P)			97		89
DBA Vittaroi(P)			97	99	98
DBA Bindaroi(P)			103	98	90
Caparoi(P)			103	93	96
DBA Lillaroi(P)			93	89	97
Sowing date	15 May		13 May	13 May	14 Jun
Rainfall J–M (mm)	51		248	272	231
Rainfall A–O (mm)	100		223	215	449

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Wheat variety quality – Northern 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 high protein percentage, high test weight or low grain screenings under a wider range of environments.

The following figures show the grain quality trends as histograms from 2021 and 2022 NVT averaged for trials in the Northern New South Wales region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

Protein and yield comparisons

Figure 1: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from six NVT sites in Northern NSW in 2021.

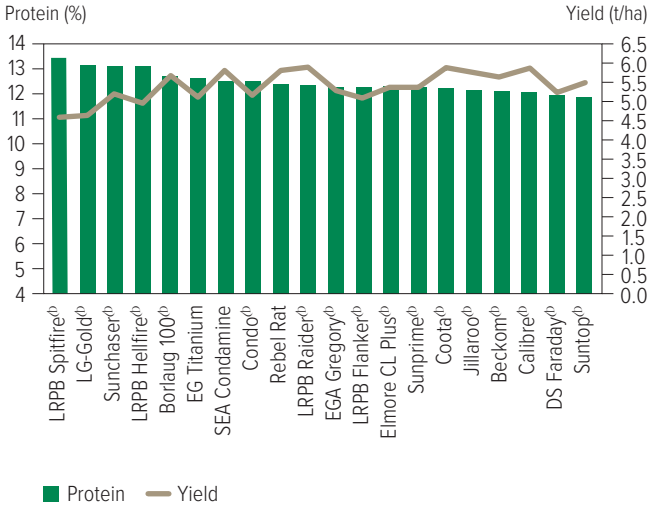


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from four NVT sites in Northern NSW in 2022.

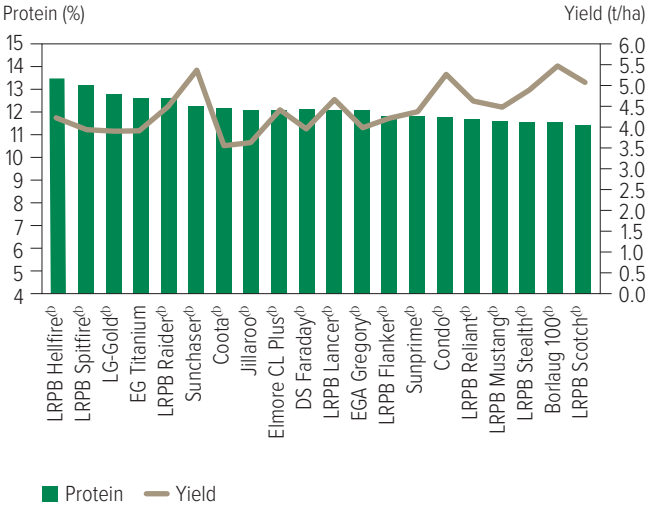


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from six NVT sites in Northern NSW in 2021.

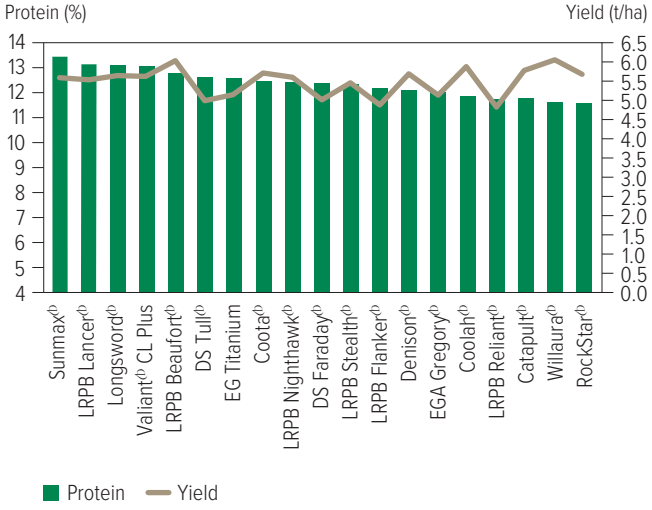


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from seven NVT sites in Northern NSW in 2022.

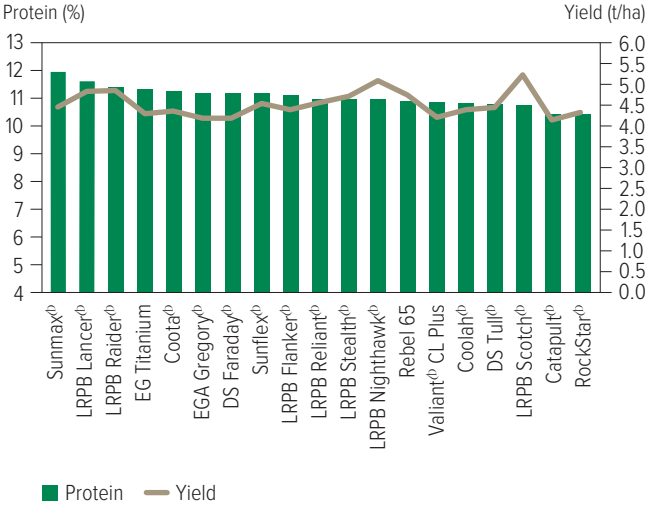


Figure 5: Protein (%) and yield (t/ha) comparisons for long season wheat varieties from one NVT site in Northern NSW in 2021.

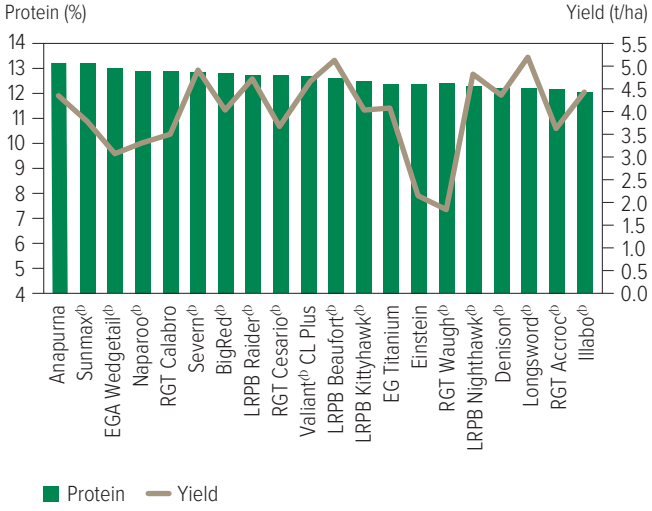


Figure 6: Protein (%) and yield (t/ha) comparisons for long season wheat varieties from one NVT site in Northern NSW in 2022.

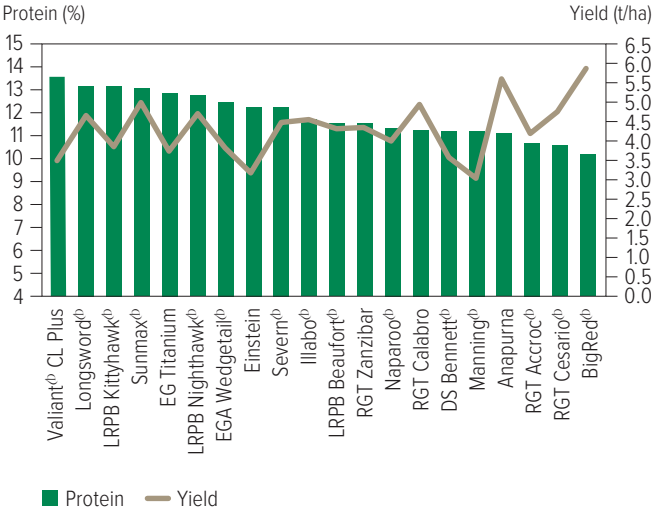


Figure 7: Protein (%) and yield (t/ha) comparisons for durum wheat varieties from six NVT sites in Northern NSW in 2021.

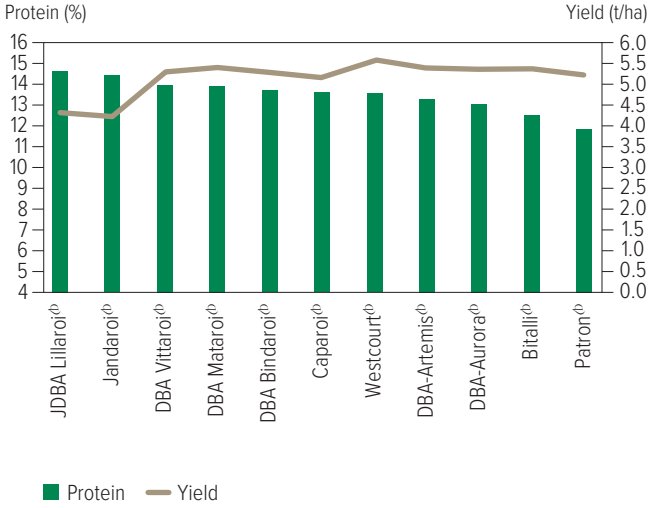
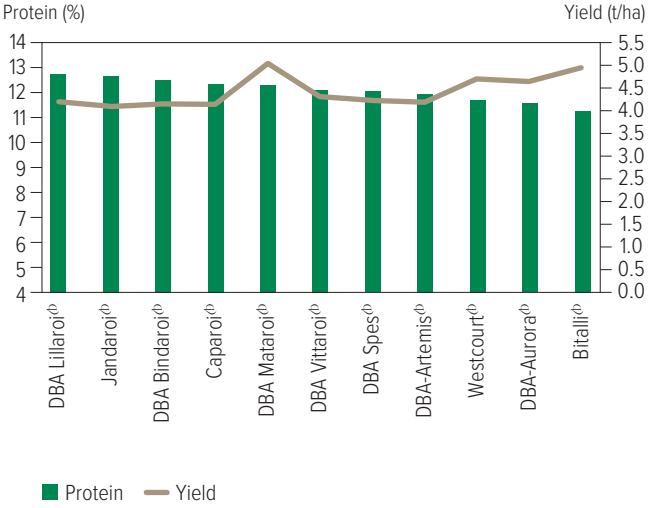


Figure 8: Protein (%) and yield (t/ha) comparisons for durum wheat varieties from seven NVT sites in Northern NSW in 2022.



Test weight comparisons

Figure 9: Test weight (kg/hL) comparisons for main season wheat varieties from six NVT sites in Northern NSW in 2021.

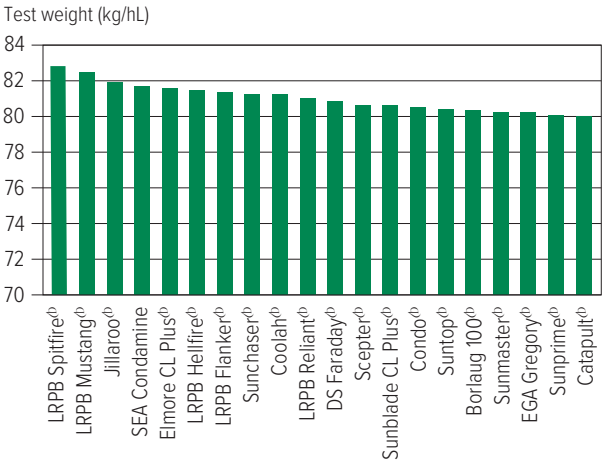


Figure 10: Test weight (kg/hL) comparisons for main season wheat varieties from four NVT sites in Northern NSW in 2022.

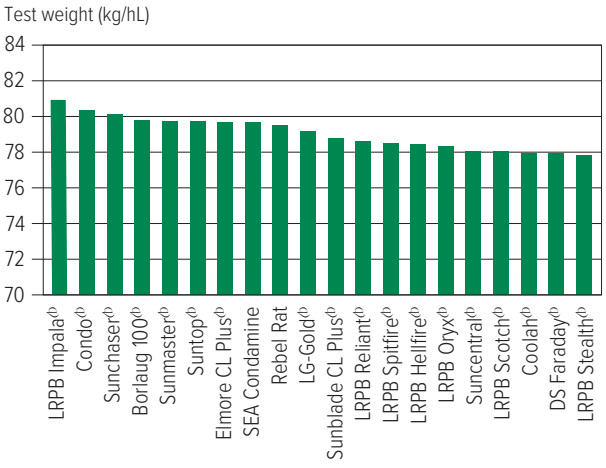


Figure 11: Test weight (kg/hL) comparisons for early season wheat varieties from six NVT sites in Northern NSW in 2021.

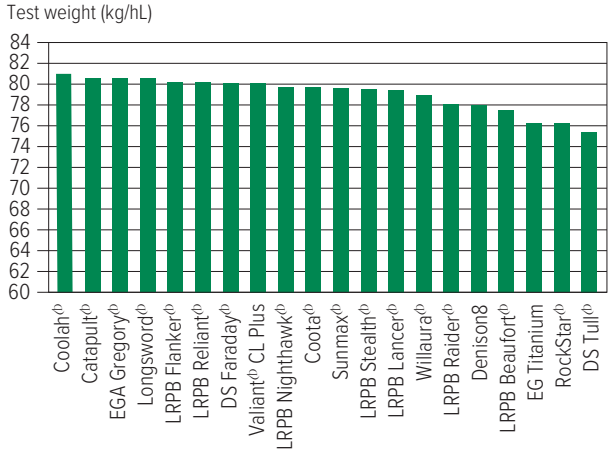


Figure 12: Test weight (kg/hL) comparisons for early season wheat varieties from seven NVT sites in Northern NSW in 2022.

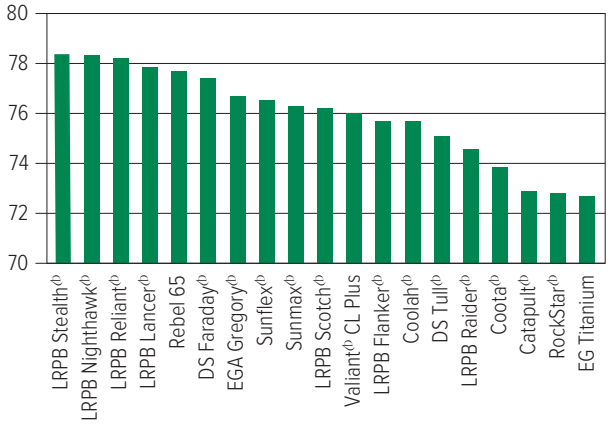


Figure 13: Test weight (kg/hL) comparisons for long season wheat varieties from one NVT sites in Northern NSW in 2021.

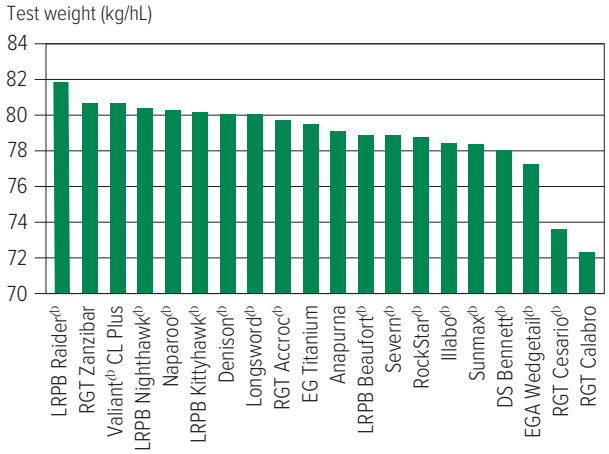


Figure 14: Test weight (kg/hL) comparisons for long season wheat varieties from one NVT site in Northern NSW in 2022.

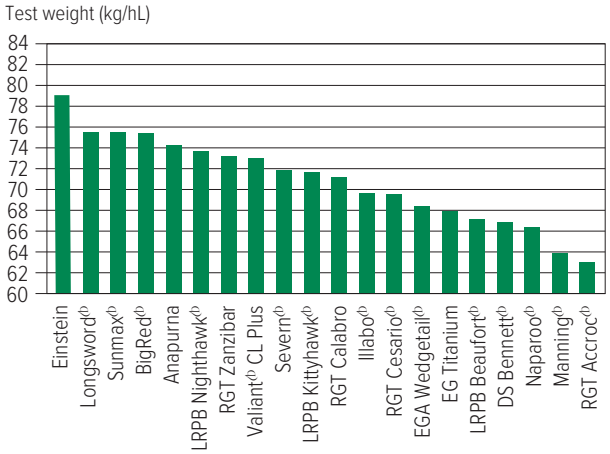
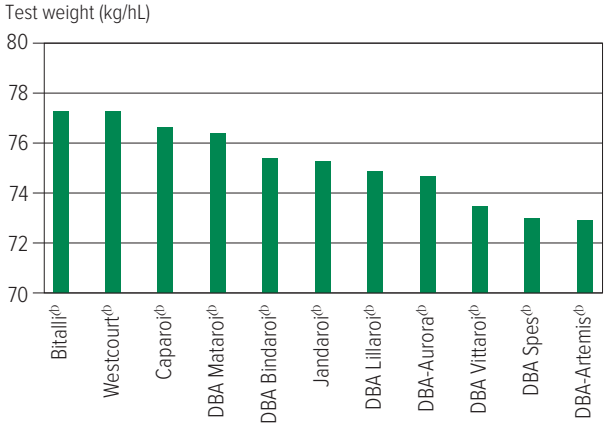


Figure 15: Test weight (kg/hL) comparisons for durm wheat varieties from six NVT sites in Northern NSW in 2021.

Figure 16: Test weight (kg/hL) comparisons for durum wheat varieties from seven NVT sites in Northern NSW in 2022.



Screenings comparisons

Figure 17: Screenings (<2.0mm) comparisons for main season wheat varieties from six NVT sites in Northern NSW in 2021.

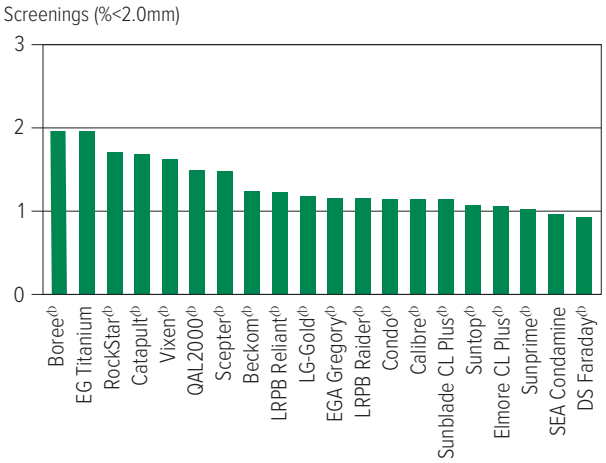


Figure 18: Screenings (<2.0mm) comparisons for main season wheat varieties from four NVT sites in Northern NSW in 2022.

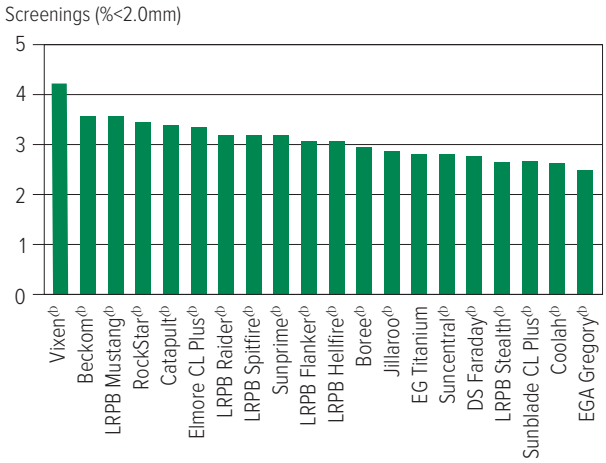


Figure 19: Screenings (<2.0mm) comparisons for early season wheat varieties from six NVT sites in Northern NSW in 2021.

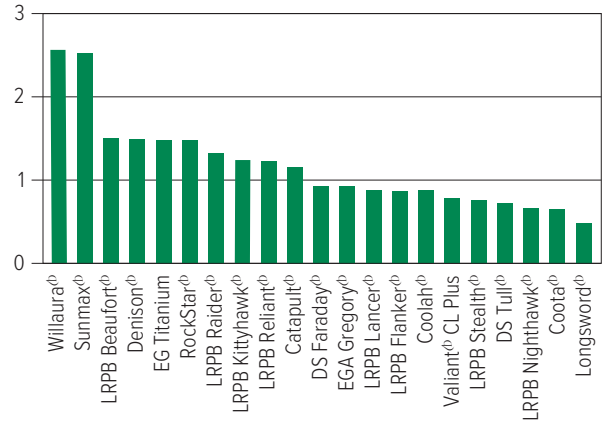


Figure 20: Screenings (<2.0mm) comparisons for early season wheat varieties from seven NVT sites in Northern NSW in 2022.

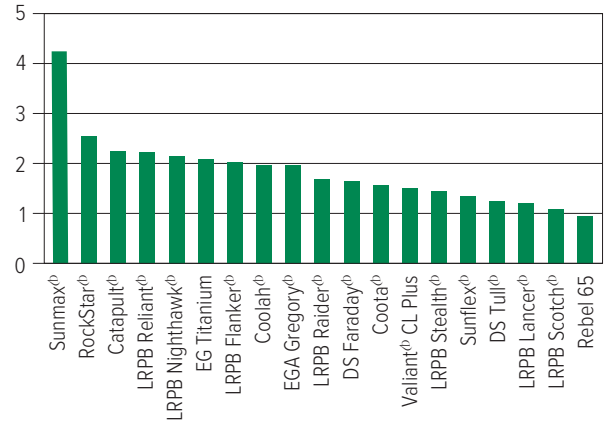


Figure 21: Screenings (<2.0mm) comparisons for long season wheat varieties from one NVT site in Northern NSW in 2021.

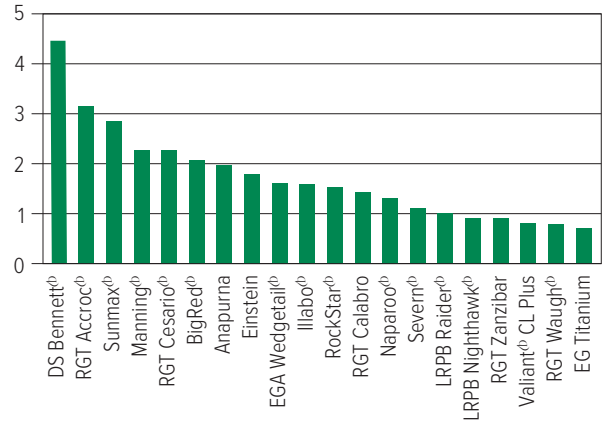


Figure 22: Screenings (<2.0mm) comparisons for long season wheat varieties from one NVT site in Northern NSW in 2022.

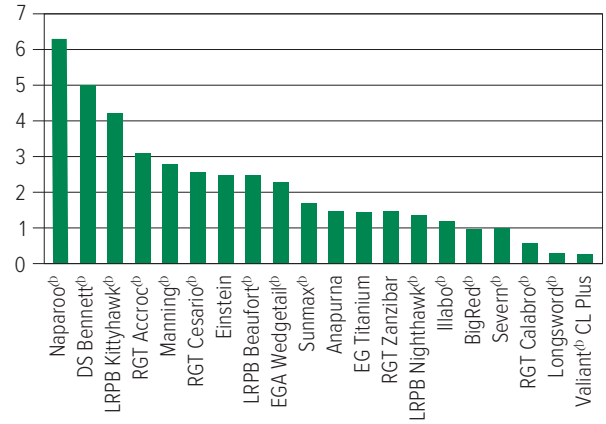


Figure 23: Screenings (<2.0mm) comparisons for durum wheat varieties from six NVT sites in Northern NSW in 2021.

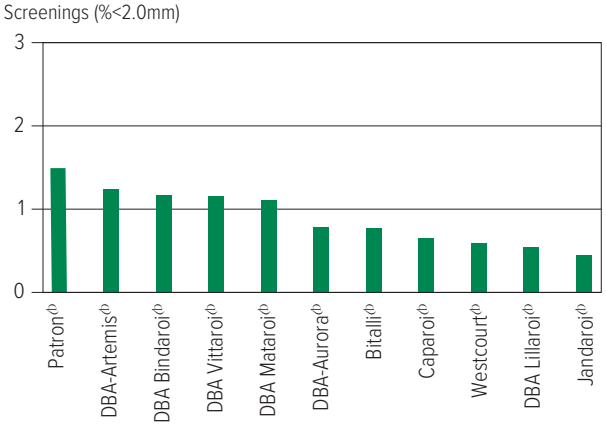
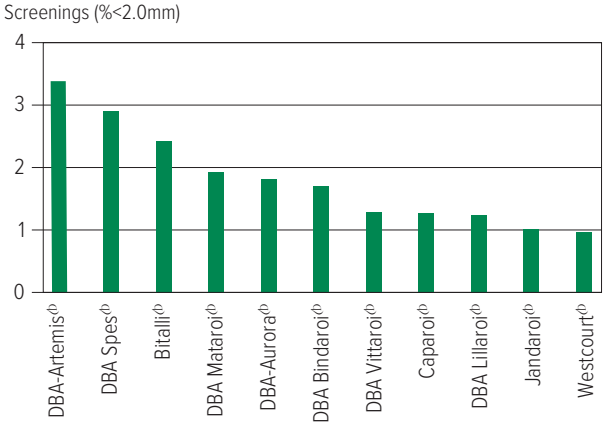


Figure 24: Screenings (<2.0mm) comparisons for durum wheat varieties from seven NVT sites in Northern NSW in 2022.



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 2023.

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 tolerance ratings.

Table 23: Wheat disease guide for New South Wales.

Variety	Crown rot	Leaf rust	Stem rust	Stripe rust (east coast resistance)	Septoria tritici blotch	Yellow leaf spot	RLN resistance (*Pratylenchus thornei*)	RLN tolerance (*Pratylenchus thornei*)	RLN resistance (*Pratylenchus neglectus*)	RLN tolerance (*Pratylenchus neglectus*)	CCN	Black point
Anapurna	SVS	MS	MSS	RMR	MRMS	MRMS	S (P)		MS		MRMS	MSS
Ascot(ф)	S	RMR	MRMS	MSS	S	MRMS	S	MI	S	MI	MR	S
Ballista(ф)	S	S	MR	MSS	SVS	MS	MRMS	MI	S	MTMI	MRMS	MS
Beckom(ф)	S	MSS	MRMS	MRMS	S	MSS	MSS	TMT	S	MTMI	R	MRMS
BigRed(ф)	S (P)	MRMS	S	RMR	MR	MR	MS		MS		S	MR (P)
Boree(ф)	S	S	MR	SVS	SVS	MRMS	MSS	MII	S	I	MSS	S
Borlaug 100(ф)	MSS	MR	MR	SVS	MSS	MRMS	MS	T	S	T	MS	MSS
Brumby(ф)	S	SVS	MR	MS	S	MRMS	MS	MI	MRMS	TMT	MRMS	MS (P)
Calibre(ф)	S	S	MR	S	S	MRMS	MSS	MI	S	MT	MRMS	MS (P)
Catapult(ф)	MSS	S	MR	S	MSS	MRMS	MS	MT	S	MII	R	S
Chief CL Plus(ф)	MSS	MR	MR	SVS	S	MRMS	MSS	IVI	MRMS	MT	MS	MS
Condo(ф)	S	S	MR	MS	S	MS	MS	TMT	S	MT	MR	MS
Coolah(ф)	MSS	RMR	MR	MSS	MSS	MSS	MS	MT	S	MT	S	S
Coota(ф)	MSS	MR	RMR	S	S	MSS	MS	MTMI	MR	MI	MR	MS
Cutlass(ф)	S	RMR	R	MSS	MSS	MSS	MSS	MI	MSS	MT	MR	MS
Denison(ф)	MSS	S	MS	S	MSS	MRMS	S	MI	S	MII	MS	MS
DS Bennett(ф)	VS	SVS	MS	S	MSS	MRMS	S		S		S	MSS
DS Faraday(ф)	MSS	R#	RMR	MS	MSS	MSS	MSS	MT	S	MTMI	MS	MSS
DS Pascal(ф)	S	MS	MSS	MRMS	MSS	MS	S	IVI	S	MTMI	S	MS
DS Tull(ф)	S	MSS	MR	MS	SVS	S	MSS	MTMI	MSS	MT	MSS	MRMS
EG Jet(ф)	S	S	S	MRMS	MSS	MRMS	S	I	S	MI	MRMS	MS
EG Titanium	MSS	MS	MS	MR	MSS	MSS	MSS	MTMI	MSS	MTMI	R	MSS
EGA Gregory(ф)	S	RMR#	MR	MS	MSS	S	MSS	MT	S	MT	S	MSS
EGA Wedgetail(ф)	S	MSS	MRMS	MS	MSS	MSS	VS	MII	S	MII	S	MS
Emu Rock(ф)	MSS	SVS	MS	SVS	S	MS	S	IVI	MSS	MI	S	MSS
Hammer CL Plus(ф)	MSS	S	MR	MS	MSS	MRMS	S	I	MSS	MTMI	MRMS	MRMS
Illabo(ф)	S	S	MRMS	MRMS	MSS	MS	MSS	MII	MSS	VI	MRMS	MRMS
Jillaroo(ф)	S	S	MS	MSS	S	MRMS	MS (P)	I	S	I	MS	MSS (P)
Kingston(ф)	S	S	S	MSS	S	MSS	MRMS	MTMI	S	MTMI	R	S
LG-Gold(ф)	MSS	S	MSS	SVS	S	S	S	MII	S	MTMI	S	S
Longsword(ф)	MSS	MR#	MR	R/S	MS	MRMS	MRMS	MI	MRMS	VI	MRMS	MS
LRPB Anvil(ф)	MSS	SVS	MR	S	VS	MSS	S	VI	MSS	MII	MRMS	S (P)
LRPB Avenger(ф)	SVS	S	MS	S	S (P)	MS	MS	MI	MSS	MI	MRMS	MS
LRPB Beaufort(ф)	S	MSS	SVS	RMR	S	MRMS	MSS	MT	MS	MI	MS	MRMS
LRPB Cobra(ф)	S	MR#	MR	S	MSS	MRMS	MSS	MI	MSS	MTMI	MS	MSS
LRPB Flanker(ф)	MSS	RMR#	MR	MRMS	MSS	MSS	MSS	MT	S	MT	S	MS
LRPB Hellfire(ф)	MSS	MSS	MR	MRMS	S	MSS	MSS	MI	MSS	MTMI	MS	S
LRPB Impala(ф)	MSS	SVS	MR	MRMS	SVS	MSS	S	MII	SVS	MTMI	MSS	MS
LRPB Kittyhawk(ф)	SVS	MR	MRMS (S)	MR	MRMS	MRMS	S	I	S	MI	S	MRMS
LRPB Lancer(ф)	MSS	RMR	R	RMR	MS	MS	MS	TMT	S	MTMI	S	MRMS
LRPB Mustang(ф)	MSS	MSS	MRMS	MR	S	MSS	MSS	MTMI	S	MI	MR	MS

Table 23: Wheat disease guide for New South Wales (continued).

Variety	Crown rot	Leaf rust	Stem rust	Stripe rust (east coast resistance)	Septoria tritici blotch	Yellow leaf spot	RLN resistance (*Pratylenchus thornei*)	RLN tolerance (*Pratylenchus thornei*)	RLN resistance (*Pratylenchus neglectus*)	RLN tolerance (*Pratylenchus neglectus*)	CCN	Black point
LRPB Nighthawk(b)	MSS	MSS	RMR	MRMS	MS	MS	MS	MI	MSS	IVI	MS	MS
LRPB Oryx(b)	MSS	RMR#	MR	MS	SVS	MSS	MSS	IVI	MSS	MII	S	MS
LRPB Parakeet(b)	MSS	R	MR	MR	SVS	MSS	S	MII	MRMS	MT	MS	MS
LRPB Raider(b)	S	RMR	RMR	MR	S	MSS	MS	MT	MSS	MTMI	S	S (P)
LRPB Reliant(b)	MS	RMR	R	MR	MSS	S	MSS	TMT	SVS	MTMI	MSS	MS
LRPB Scotch(b)	S	MR (P)	MSS	MRMS (P)	S (P)	MRMS	S	MTMI	MS	MTMI	MS	MS (P)
LRPB Spitfire(b)	MS	S	MR	MR (S)	S	S	MS	MTMI	MSS	MI	MS	MSS
LRPB Stealth(b)	MSS	RMR#	R	RMR	MSS	MS	S	MTMI	MSS	MTMI	S	MRMS
LRPB Trojan(b)	MS	MR#	MRMS	S	S	MSS	MSS	MI	MSS	MT	MS	MS
Mace(b)	S	S	MRMS	SVS	SVS	MRMS	MS	MT	MS	MII	MRMS	MRMS
Manning(b)	VS	MSS	MR	RMR	MRMS/S	MRMS	S		MSS		S	S
Razor CL Plus(b)	S	S	MRMS	MS	SVS	MSS	MS	MI	S	MT	MR	MS
Rebel 65	MSS (P)	MS (P)	MSS (P)	MSS (P)	SVS	MSS (P)	MS	MT	S	TMT	MSS	MSS (P)
Rebel Rat	S (P)	MSS	MRMS	MS (P)	MSS (P)	MRMS	MSS	TMT	S	T	MRMS	MSS (P)
Reilly(b)	S	MSS	MR	MS	S	S	MSS	MTMI	MS	MTMI	R	MSS (P)
RGT Accroc(b)	SVS	SVS	MS	RMR	MS	MRMS	MSS		S		S	MRMS
RGT Calabro	SVS	MSS	MS	RMR	MRMS	MR	MS		S	VI	S	MS
RGT Cesario(b)	VS	RMR	R	RMR	MRMS	MR	MSS		MRMS		MSS (P)	
RGT Waugh(b)	S	S	MS	RMR	MRMS	MRMS	MSS		MS		MS	MRMS (P)
RGT Zanzibar	S	SVS	VS	MRMS	MSS	MS	MS (P)	MI	S	IVI	MSS	MRMS
RockStar(b)	S	S	MRMS	S	S	MRMS	MS	MI	MRMS	I	MSS	MSS
Scepter(b)	MSS	MSS	MRMS	MSS	S	MRMS	MSS	MT	S	MTMI	MRMS	MS
SEA Condamine	MSS	RMR#	MRMS	MSS	VS	MSS	MS	MT	S	MT	S	MRMS
Severn(b)	S	MRMS	MS	RMR	MSS	MRMS	MRMS		S		MSS (P)	MR
Sheriff CL Plus(b)	S	SVS	MS	S	S	MRMS	MRMS	I	MRMS	MTMI	MS	MS
Stockade(b)	S	MR (P)	MS	MR	MS	MRMS	MSS	MTMI	S	MT	MRMS	MRMS (P)
Sunblade CL Plus(b)	S	MSS	MS	MRMS	S	MSS	MRMS	MT	MSS	MI	MSS	MRMS
Suncentral(b)	MSS	RMR	MRMS	MSS	S	MSS	MRMS	MT	MRMS	MI	S	MRMS
Sunchaser(b)	MSS	R	MR	RMR	MSS	MS	MSS	MT	MSS	MTMI	MSS	MRMS
Sunflex(b)	MSS	RMR/S	MR	MRMS	SVS	MS	MSS	MI	S	MI	MS	MSS
Sunmaster(b)	S	RMR#	MS	MRMS	S	MSS	MS	TMT	MRMS	MTMI	MSS	MR
Sunmax(b)	MSS	MS	MRMS	RMR	MSS	MSS	MS	MI	S	MT	MRMS	MRMS
Sunprime(b)	S	MR#	MS	MS	S	MSS	S	MT	S	MTMI	MS	MSS
Suntop(b)	MSS	MR	MRMS	MRMS	MSS	MSS	MRMS	TMT	S	MT	S	MSS
Valiant(b) CL Plus	S	S	MR	MSS	MSS	MRMS	S (P)	IVI	S	MII	MSS (P)	MS (P)
Vixen(b)	S	SVS	MRMS	SVS	S	MRMS	MS	I	MRMS	I	MSS	MSS
DURUM												
Bitalli(b)	SVS	MR	RMR	MRMS	MSS	MRMS	RMR	MII	MSS	MI	MSS	MS
Caparoi(b)	VS	RMR	MR	MS	MRMS/S	MR	MR	MT	MS	MI	MRMS (P)	MSS
DBA Bindaroi(b)	SVS	MR	MR	MS	MS	MRMS	MR	MTMI	MRMS	MI	MS	MRMS
DBA Lillaroi(b)	SVS	RMR	RMR	MS	S	MRMS	RMR	MT	MRMS	MI	S	MS
DBA Mataroi(b)	SVS	MR	MR	MS	MSS	MRMS	RMR	MI	MS	MT	MRMS	MS
DBA Spes(b)	VS	RMR	R	MS	S	MRMS	RMR	MI	MRMS	MTMI	MS	MS
DBA Vittaroi(b)	SVS	RMR	MR	MS	MSS	MRMS	MR	MI	MS	I	S	MSS
DBA-Artemis(b)	VS	RMR	MR	MRMS	MRMS/S	MRMS	MR	MTMI	MS	MII	MS	MS
Westcourt(b)	VS	RMR	RMR	MR	S	MRMS	MR	MT	MS	MI	MSS	MSS

Learn more via the NVT Disease Ratings.
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, # warning, may be more susceptible to alternate pathotypes, ( ) show outlier.

BARLEY

New barley varieties

The following information is for barley varieties released in the 12 months to the date when the MET analysis was published on NVT online.

Variety	Variety owner	Grain classification#	End point royalty* ($)	Comments supplied by variety owner
Combat(Φ)	InterGrain	Feed	3.50	Mid-maturity suited to all regions. Semi-prostrate growth habit that will provide more weed competition than Rosalind(Φ). A potential variety replacement for Rosalind(Φ) with a more competitive plant type.
Titan AX(Φ)	Australian Grain Technologies	Under malt evaluation	4.55	The world's first CoAXium® barley variety. Mid-season maturity, slightly later than Compass(Φ), similar to RGT Planet(Φ). Agronomically similar to Compass(Φ).
Zena(Φ) CL	InterGrain	Under malt evaluation	4.25	Zena(Φ) CL is an imidazolinone-tolerant barley variety best-suited to medium-high rainfall environments.

* EPR amount is ex-GST, (Φ) denotes Plant Breeder's Rights apply, # barley malting quality accreditation correct at time of download (10 March 2023).

Refer to the latest *Crop Sowing Guide* for further information at grdc.com.au/nvt-crop-sowing-guides

Barley variety yield performance – Northern New South Wales

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are 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 Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Coonamble main season barley.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		0.50			7.06
Minotaur[ф]	Trial failed		Trial failed	Trial failed	112
RGT Planet[ф]		94			108
Combat[ф]					105
Cyclops[ф]					105
Yeti[ф]		151			98
Rosalind[ф]		104			99
Laperouse[ф]		132			97
Beast[ф]		120			97
Bottler[ф]		86			99
Leabrook[ф]		114			97
HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)					
Zena[ф] CL					105
Maximus[ф] CL		137			95
Spartacus CL[ф]		113			96
Titan AX[ф]					95
Sowing date	**20 Jun**	**20 May**	**12 May**	**14 May**	**27 May**
Rainfall J–M (mm)	**77**	**155**	**248**	**224**	**147**
Rainfall A–O (mm)	**105**	**54**	**230**	**267**	**583**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 2: North Star main season barley.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	3.24	0.41	3.59	3.73	
Yeti[ф]		145	115	109	Trial failed
Laperouse[ф]	105	123	104	110	
Beast[ф]		142	114	94	
Minotaur[ф]				111	
Leabrook[ф]	112	111	113	94	
Combat[ф]				106	
Compass[ф]	108	137	115	89	
Fathom[ф]	91	131	111	103	
RGT Planet[ф]	112	102	99	99	
Rosalind[ф]	104	115	99	101	
HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)					
Maximus[ф] CL	96	125	97	118	
Commodus[ф] CL			112	89	
Spartacus CL[ф]	92	166	99	102	
Sowing date	**13 Jun**	**14 May**	**11 May**	**4 May**	**10 May**
Rainfall J–M (mm)	**96**	**97**	**238**	**419**	**215**
Rainfall A–O (mm)	**136**	**48**	**237**	**274**	**475**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 3: Somerton main season barley.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	1.03	0.78	3.57	2.24	3.05
Yeti[ф]		144	119	107	122
Laperouse[ф]	109	119	118	113	123
Rosalind[ф]	105	115	106	109	110
RGT Planet[ф]	107	117	109	102	100
Minotaur[ф]				116	81
Combat[ф]				91	103
Bottler[ф]	105	113	95	102	102
Cyclops[ф]			93	117	84
Leabrook[ф]	111	112	96	87	101
LG Alestar[ф]	98	75	93	98	109
HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)					
Maximus[ф] CL	103	115	126	126	131
Zena[ф] CL				107	104
Spartacus CL[ф]	100	151	87	120	96
Titan AX[ф]					92
Sowing date	**13 Jun**	**17 May**	**20 May**	**14 May**	**15 Jun**
Rainfall J–M (mm)	**103**	**91**	**299**	**274**	**273**
Rainfall A–O (mm)	**154**	**70**	**367**	**327**	**516**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 4: Tulloona main season barley.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		2.18	4.08	3.62	
Minotaur[ф]	Trial failed			105	Trial failed
Yeti[ф]		117	107	115	
RGT Planet[ф]		106	101	116	
Laperouse[ф]		106	100	116	
Combat[ф]				102	
Cyclops[ф]			106	99	
Rosalind[ф]		103	95	112	
Beast[ф]		117	105	87	
Leabrook[ф]		108	104	92	
Bottler[ф]		103	91	106	
HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)					
Maximus[ф] CL		102	98	124	
Zena[ф] CL				119	
Spartacus CL[ф]		116	96	99	
Sowing date	**24 May**	**14 May**	**12 May**	**11 May**	**10 May**
Rainfall J–M (mm)	**96**	**97**	**263**	**419**	**215**
Rainfall A–O (mm)	**136**	**48**	**193**	**274**	**475**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 5: Walgett main season barley.					
Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	3.13		3.95	6.47	5.51
Combat$^{\phi}$		No trial		105	108
Yeti$^{\phi}$			110	101	109
RGT Planet$^{\phi}$	105		101	108	104
Minotaur$^{\phi}$			105	108	106
Laperouse$^{\phi}$	107		106	102	105
Leabrook$^{\phi}$	112		103	96	103
Rosalind$^{\phi}$	101		99	101	100
Beast$^{\phi}$			102	94	101
Cyclops$^{\phi}$			99	103	98
Fathom$^{\phi}$	97		103	93	100
HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)					
Maximus$^{\phi}$ CL	101		106	103	104
Zena$^{\phi}$ CL				107	100
Commodus$^{\phi}$ CL			99	89	97
Titan AX$^{\phi}$					96
Sowing date	**15 May**		**13 May**	**13 May**	**15 Jun**
Rainfall J–M (mm)	**51**		**248**	**272**	**231**
Rainfall A–O (mm)	**100**		**223**	**215**	**449**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Barley variety quality – Northern 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 high protein percentage, high test weight or low grain screenings under a wider range of environments.

The following figures show the grain quality trends as histograms from 2021 and 2022 NVT averaged for trials in the Northern New South Wales region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

Protein and yield comparisons

Figure 1: Protein (%) and yield (t/ha) comparisons for main season barley varieties from four NVT sites in Northern NSW in 2021.

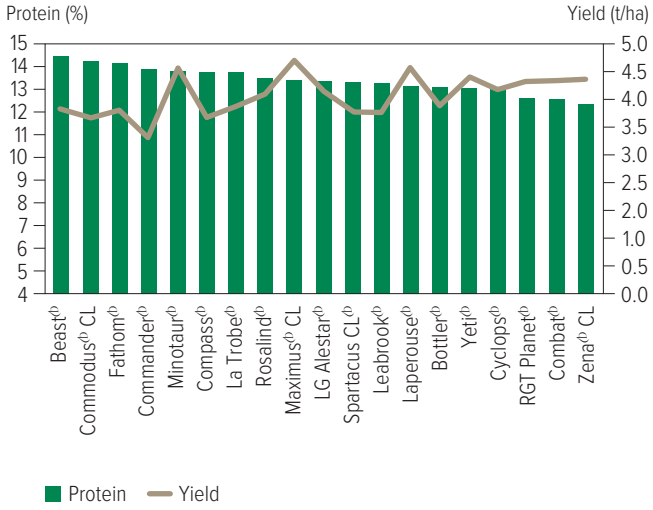
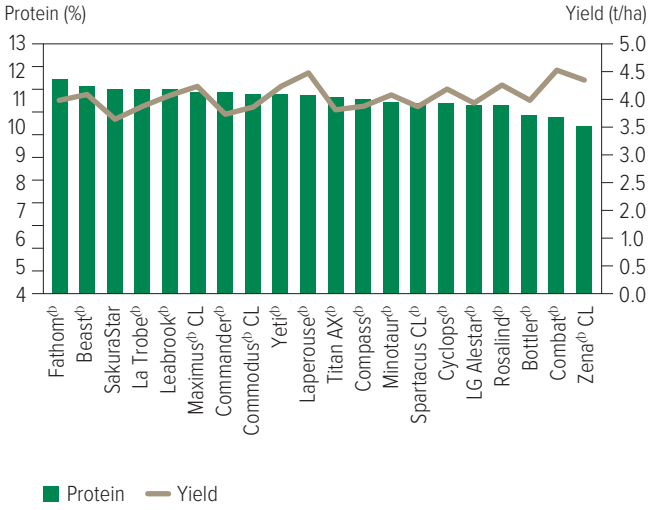


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from three NVT sites in Northern NSW in 2022.



Test weight comparisons

Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from four NVT sites in Northern NSW in 2021.

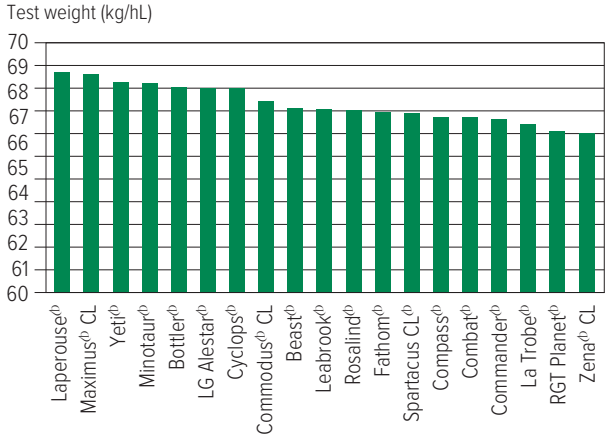
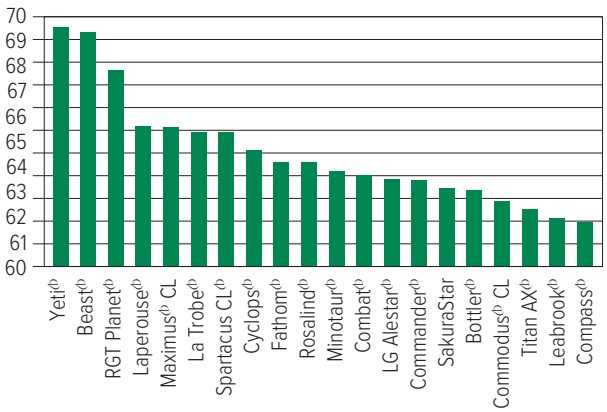


Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from three NVT sites in Northern NSW in 2022.



Screenings comparisons

Figure 5: Screenings (<2.2mm) comparisons for main season barley varieties from four NVT sites in Northern NSW in 2021.

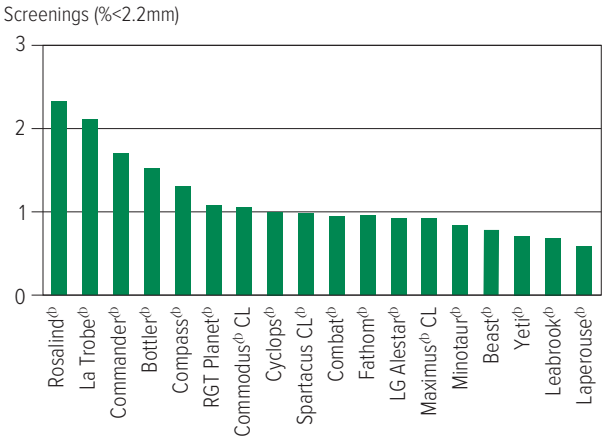
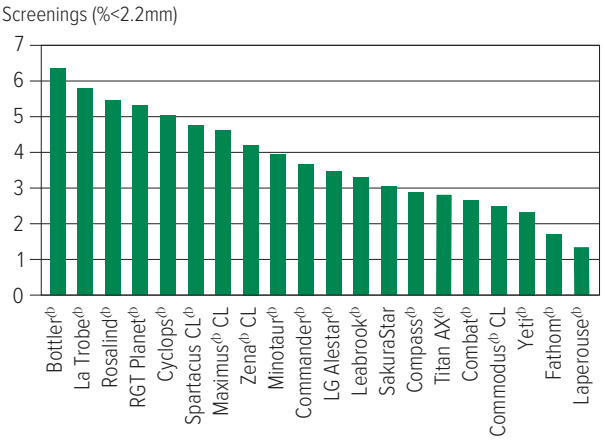


Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from three NVT sites in Northern NSW in 2022.



Retention comparisons

Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from four NVT sites in Northern NSW in 2021.

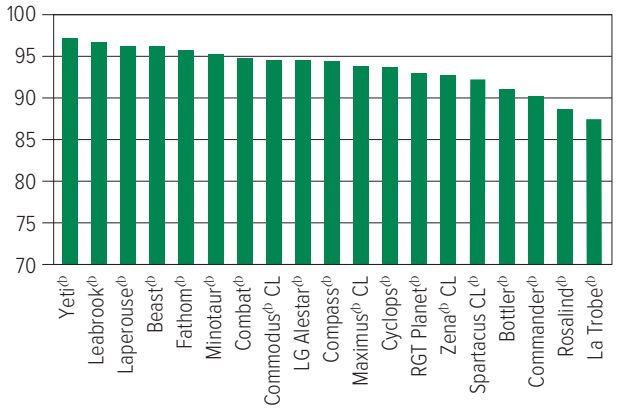
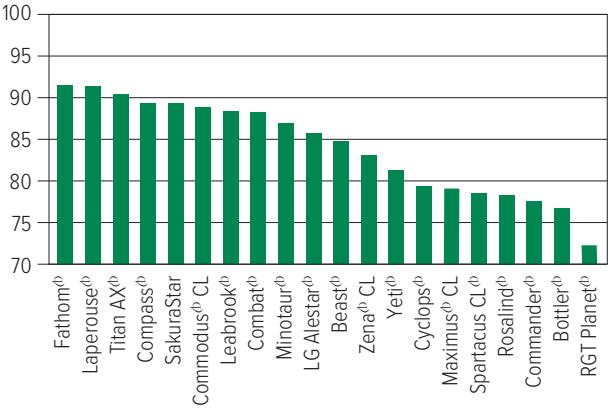


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from three NVT sites in Northern NSW in 2022.



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 2023.

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 tolerance ratings.

Table 5: Barley disease guide for New South Wales.

Variety	Leaf scald	Net form net blotch	Spot form net blotch	Powdery mildew	Leaf rust	Barley grass stripe rust	Crown rot	CCN	RLN resistance (*Pratylenchus thornei*)	RLN tolerance (*Pratylenchus thornei*)	RLN resistance (*Pratylenchus neglectus*)	RLN tolerance (*Pratylenchus neglectus*)	Ramularia
Beast(Þ)	SVS	MSS	MS	S	MSS	R	S	MR	MRMS	T	MRMS	MI	SVS (P)
Bottler(Þ)	SVS	MRMS	MSS	RMR	MR	R-RMR	SVS		RMR	MI	MS	MT	SVS (P)
Buff(Þ)	SVS	MS	MSS	S	SVS	R	S		MS	MI	MRMS	MT	SVS (P)
Combat(Þ)	MSS	MSS	MR	MS	S	R	S (P)	MRMS	MS		MR		SVS (P)
Commander(Þ)	SVS	S	MSS	MSS	SVS	R	S	R	MRMS	MT	MRMS	MTMI	SVS (P)
Commodus(Þ) CL	SVS	MS	MSS	MS	MS	RMR	S (P)	R	MRMS	MTMI	MRMS	TMT	SVS (P)
Compass(Þ)	S	MSS	MS	MSS	S	R	S	R	MR	TMT	MRMS	TMT	SVS (P)
Cyclops(Þ)	S	MS	MS	S	S	R	S (P)	S	MRMS	MTMI	MRMS	MI	SVS (P)
Fandaga(Þ)	SVS	MRMS	S	R	MR	R-MR	MSS (P)	R	MR		MR		VS (P)
Fathom(Þ)	S	S	MR	MRMS	MS	RMR	SVS	R	MR	TMT	MRMS	T	SVS (P)
La Trobe(Þ)	SVS	MRMS	S	MSS	MS	R	S	R	MRMS	MT	MRMS	MT	SVS (P)
Laperouse(Þ)	SVS	MS	MRMS	MSS	SVS	R-MR	S	S	MR	MTMI	MR	MI	VS (P)
Leabrook(Þ)	SVS	MS	MS	S	SVS	RMR	S	RMR	RMR	TMT	MRMS	MT	VS (P)
LG Alestar(Þ)	SVS	MS	S	MR	MRMS	R	S	R^ (P)	MR	MTMI	MR	I	SVS (P)
Maximus(Þ) CL	S	MRMS	MS	MS	MSS	R	S	R	MR	MTMI	MRMS	MT	VS (P)
Minotaur(Þ)	VS	MRMS	S	S	SVS	R	MS	R	MR	MT	MRMS	MI	SVS (P)
RGT Planet(Þ)	MSS	MSS	SVS	RMR	MR	R-RMR	MSS	R (P)	MR	MI	MRMS	MT	VS (P)
Rosalind(Þ)	MSS	MR	MSS	MSS	MR	R	MSS	R	MR	TMT	MRMS	MT	VS (P)
SakuraStar	SVS	MS	MSS	MSS	S	RMR	S	R	MR	MI	MR	MT	VS (P)
Spartacus CL(Þ)	SVS	MSS	S	MSS	MRMS	R	S	R	MRMS	MI	MRMS	MII	VS (P)
Titan AX(Þ)	SVS	MS	MSS	MS	S	R	MSS (P)	MR (P)	MR		R		VS (P)
Yeti(Þ)	VS	MS	MRMS	MSS	S	MR	S	RMR	MR	TMT	MR	TMT	VS (P)
Zena(Þ) CL	MS	MS	MSS	R	S	RMR	MSS (P)	R	MR		MRMS		VS (P)

Learn more via the NVT Disease Ratings.
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, ^ line contains a few susceptible off types.

CANOLA

New canola varieties

The following information is for canola varieties released in the 12 months to the date when the MET analysis was published on NVT online.

Variety	Variety owner	End point royalty* ($)	Comments supplied by variety owner
Bandit TT(ф)	Australian Grain Technologies	10.00	Triazine-tolerant, open-pollinated variety suitable to low rainfall environments. Very quick to flower.
Hyola® Solstice CL	Pacific Seeds	-	Mid-maturity Clearfield® tolerant hybrid. Suitable for medium and high-rainfall zones, dryland and irrigation. Medium height, vigorous early growth and even flowering.
InVigor® T 4511	BASF Australia	-	InVigor® T 4511 is an early-mid triazine-tolerant hybrid of medium height. With excellent early vigour InVigor® T 4511 is ideally suited to early and mid-season growing regions. With higher seedling vigour, higher oil and better blackleg tolerance InVigor® T 4511 is a replacement for InVigor® T 3510 and InVigor® T 4510.
PY520TC	Pioneer Hi-Bred Aust Pty Ltd	-	A mid-maturity hybrid suited to medium-long season environments. Triazine-tolerant and Clearfield®-tolerant variety.
Renegade TT(ф)	Australian Grain Technologies	10.00	Triazine-tolerant, open-pollinated variety. Quick to flower with best performance under medium yield potential conditions.
RGT Baseline TT	RAGT	10.00	Mid-maturing triazine-tolerant hybrid variety. Suited to medium to high-rainfall zones. Medium-tall height. Marketed by Seed Force, an RAGT Company.

* EPR amount is ex-GST, (ф) denotes Plant Breeder's Rights apply.

Refer to the latest *Crop Sowing Guide* for further information at grdc.com.au/nvt-crop-sowing-guides

Canola variety yield performance – Northern New South Wales

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are 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 Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Mullaley med-high rainfall IMI.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		**1.18**	**2.87**		**2.78**
Hyola® Solstice CL	No trial			Trial failed	103
Pioneer® 45Y95 CL					113
Pioneer® 44Y94 CL			101		113
Hyola® Equinox CL			108		97
Pioneer® 45Y93 CL		103	101		109
Pioneer® 44Y90 CL		102	100		
Saintly CL		110			
Pioneer® 43Y92 CL		104			103
VICTORY® V75-03CL		85	95		
VICTORY® V7002CL		87	96		
Sowing date		**10 May**	**27 Apr**	**20 May**	**25 May**
Rainfall J–M (mm)		**132**	**329**	**219**	**271**
Rainfall A–O (mm)		**95**	**349**	**320**	**560**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 2: Bellata low-med rainfall IMI.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	**1.26**		**1.19**		**1.63**
Pioneer® 44Y94 CL		Trial failed		Compromised trial	107
Pioneer® 45Y95 CL					97
Hyola® 575CL	98				
Pioneer® 44Y90 CL	120		106		
Pioneer® 43Y92 CL	109		96		99
Hyola® Equinox CL					111
VICTORY® V7002CL	83		68		
Sowing date	**18 May**	**7 May**	**23 Apr**	**21 May**	**4 May**
Rainfall J–M (mm)	**91**	**67**	**337**	**377**	**274**
Rainfall A–O (mm)	**108**	**81**	**262**	**372**	**589**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 3: Mullaley med-high rainfall TT.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		**1.30**	**2.70**		**2.18**
HyTTec® Trifecta	No trial			Trial failed	118
Hyola® Blazer TT			105		119
HyTTec® Trophy		112	104		115
SF Dynatron TT™					113
PY520TC					116
InVigor® T 4510		114	105		109
InVigor® T 4511					111
RGT Capacity™ TT		113			108
Hyola® Enforcer CT		111	106		103
RGT Baseline TT					111
Sowing date		**10 May**	**27 Apr**	**20 May**	**25 May**
Rainfall J–M (mm)		**132**	**329**	**219**	**271**
Rainfall A–O (mm)		**95**	**349**	**320**	**560**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 4: Bellata low-med rainfall TT.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	**1.34**		**1.02**		**1.57**
Hyola® Blazer TT		Trial failed	136	Compromised trial	113
SF Dynatron TT™					104
HyTTec® Trophy	112		121		107
InVigor® T 4510	115		111		100
HyTTec® Trident			121		107
Hyola® Enforcer CT			100		101
InVigor® T 4511					100
Renegade TT®					107
RGT Capacity™ TT					113
SF Spark TT			95		97
Sowing date	**18 May**	**7 May**	**23 Apr**	**21 May**	**4 May**
Rainfall J–M (mm)	**91**	**67**	**337**	**377**	**274**
Rainfall A–O (mm)	**108**	**81**	**262**	**372**	**589**

pecial thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Australian canola variety disease ratings

The following table contains varietal ratings for blackleg disease of canola.
These ratings are updated twice a year by crop pathologists and were released in autumn 2023.
Varieties are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

Table 5: Canola disease guide – autumn 2023 ratings.

Variety	2023 autumn blackleg rating			Type
	Bare	Fluopyram (e.g. ILeVO®)	Pydiflumetofen (e.g. Saltro®)	
CONVENTIONAL VARIETIES				
Nuseed® Quartz	R			Hybrid
Nuseed® Diamond	RMR	R	R	Hybrid
Outlaw(ф)	RMR	R	R	Open pollinated
TRIAZINE-TOLERANT VARIETIES				
HyTTec® Trident	R			Hybrid
HyTTec® Trifecta	R			Hybrid
HyTTec® Trophy	R	R	R	Hybrid
Hyola® Blazer TT	R			Hybrid
DG BIDGEE TT(ф)	R	R	R	Open pollinated
InVigor® T 4511	R	R		Hybrid
DG MURRAY TT(ф)	R			Open pollinated
DG Torrens TT(ф)	R		R	Open pollinated
Monola® H421TT	RMR			High stability oil, hybrid
Monola® 420TT	RMR			High stability oil, open pollinated
ATR-Bluefin(ф)	RMR			Open pollinated
InVigor® T 4510	MR	R	R	Hybrid
SF Spark TT	MR	R	R	Hybrid
HyTTec® Velocity	MR			Hybrid
Renegade TT(ф)	MR	R	R	Open pollinated
Monola® 422TT	MR			High stability oil, open pollinated
ATR-Stingray(ф)	MRMS	R	R	Open pollinated
RGT Baseline™ TT	MRMS	R	R	Hybrid
ATR-Swordfish(ф)	MRMS			Open pollinated
SF Dynatron™ TT	MRMS	R	R	Hybrid
InVigor® T 6010	MRMS	R	R	Hybrid
RGT Capacity™ TT	MRMS	R	R	Hybrid
Bandit TT(ф)	MRMS	R	R	Open pollinated
AFP Cutubury(ф)	MS	RMR	RMR	Open pollinated
ATR-Bonito(ф)	MS	RMR	R	Open pollinated
IMIDAZOLINONE-TOLERANT VARIETIES				
Hyola® Feast CL	R			Winter, hybrid, Clearfield®
RGT Nizza CL	R			Winter, hybrid, Clearfield®
Hyola® Solstice CL	R			Hybrid, Clearfield®
Captain CL	R			Winter, hybrid, Clearfield®
Hyola® Equinox CL	R			Hybrid, Clearfield®
Pioneer® 45Y93 CL	R		R	Hybrid, Clearfield®
RGT Clavier™ CL	R			Winter, hybrid, Clearfield®
Hyola® 970CL	R			Winter, hybrid, Clearfield®
Phoenix CL	R			Winter, hybrid, Clearfield®
Nuseed® Ceres IMI	R			Hybrid
VICTORY® V7002CL	R			High stability oil, hybrid, Clearfield®

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.
Please check updated ratings using the Blackleg Management Guide or the NVT Disease Ratings.

Table 5: Canola disease guide – autumn 2023 ratings (continued).				
Variety	2023 autumn blackleg rating			Type
	Bare	Fluopyram (e.g. ILeVO®)	Pydiflumetofen (e.g. Saltro®)	
Pioneer® 43Y92 CL	R		R	Hybrid, Clearfield®
Pioneer® 45Y95 CL	R		R	Hybrid, Clearfield®
Pioneer® 44Y94 CL	R		R	Hybrid, Clearfield®
VICTORY® V75-03CL	RMR	R		High stability oil, hybrid, Clearfield®
IMIDAZOLINONE AND TRIAZINE-TOLERANT VARIETIES				
Hyola® Enforcer CT	R			Hybrid, Clearfield®, Triazine
Pioneer® PY520 TC	RMR	R	R	Hybrid, Clearfield®, Triazine
GLYPHOSATE-TOLERANT VARIETIES				
Nuseed® Raptor TF	R			Hybrid, TruFlex®
Nuseed® Eagle TF	R		R	Hybrid, TruFlex®
DG Hotham TF	R		R	Hybrid, TruFlex®
VICTORY® V55-04TF	R	R		High stability oil, hybrid, TruFlex®
VICTORY® V5003RR	R	R		High stability oil, hybrid, Roundup Ready®
DG Lofty TF	R		R	Hybrid, TruFlex®
Pioneer® 45Y28RR	RMR		R	Hybrid, Roundup Ready®
Nuseed® Hunter TF	RMR		R	Hybrid, TruFlex®
Pioneer® 44Y27 RR	RMR	R	R	Hybrid, Roundup Ready®
InVigor® LR 4540P	RMR	R		Hybrid, LibertyLink®, TruFlex®
Pioneer® 44Y30 RR	RMR		R	Hybrid, Roundup Ready®
Nuseed® Emu TF	MR		R	Hybrid, TruFlex®
Hyola® 410XX	MR			Hybrid, TruFlex®
DG Bindo TF	MR			Hybrid, TruFlex®
InVigor® R 4022P	MR	R		Hybrid, TruFlex®
InVigor® R 4520P	MRMS	R		Hybrid, TruFlex®
GLYPHOSATE AND IMIDAZOLINONE-TOLERANT VARIETIES				
Hyola® Regiment XC	R			Hybrid, TruFlex®, Clearfield®
Hyola® Battalion XC	R			Hybrid, TruFlex®, Clearfield®
Hyola® Garrison XC	R			Hybrid, TruFlex®, Clearfield®
GLUFOSINATE AND TRIAZINE-TOLERANT VARIETIES				
InVigor® LT 4530P	RMR	R		Hybrid, LibertyLink®, Triazine

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.
Please check updated ratings using the Blackleg Management Guide or the NVT Disease Ratings.

CHICKPEA

Chickpea variety yield performance – Northern New South Wales

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are 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 Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Bellata desi chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	**0.99**		**2.27**	**2.71**	
PBA Drummond^{Ф}	112	Trial failed	113	107	Compromised trial
Jimbour	104				
PBA Seamer^{Ф}	93		106	105	
CBA Captain^{Ф}	106		101	103	
PBA HatTrick^{Ф}	96		96	95	
PBA Boundary^{Ф}	103		93	92	
Kyabra^{Ф}	93		99	85	
Sowing date	**5 Jun**	**22 Jul**	**15 May**	**21 May**	**23 Jun**
Rainfall J–M (mm)	**91**	**67**	**337**	**377**	**274**
Rainfall A–O (mm)	**108**	**81**	**235**	**372**	**589**

Special thanks to 2022 trial cooperator – permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 2: Bullarah desi chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			**2.48**	**3.13**	
PBA Drummond^{Ф}	Trial failed	Trial failed	108	106	Trial failed
CBA Captain^{Ф}			101	104	
PBA Boundary^{Ф}			96	103	
PBA HatTrick^{Ф}			97	97	
PBA Seamer^{Ф}			101	92	
Kyabra^{Ф}			97	95	
Sowing date	**6 Jul**	**24 May**	**14 May**	**11 May**	**16 Jun**
Rainfall J–M (mm)	**203**	**50**	**377**	**422**	**216**
Rainfall A–O (mm)	**105**	**24**	**297**	**253**	**390**

Special thanks to 2022 trial cooperator, Rimanui Farms.
Learn more via the NVT Long Term Yield Reporter

Refer to the latest *Crop Sowing Guide* for further information at grdc.com.au/nvt-crop-sowing-guides

Table 3: Coonamble desi chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			2.19	2.99	
PBA Drummond^{Ф}	Trial failed	Trial failed	117	110	Trial failed
CBA Captain^{Ф}			103	105	
PBA Seamer^{Ф}			99	101	
PBA Boundary^{Ф}			97	99	
PBA HatTrick^{Ф}			96	97	
Kyabra^{Ф}			100	91	
Sowing date	**20 Jun**	**25 Jun**	**26 May**	**27 May**	**10 Jun**
Rainfall J–M (mm)	**77**	**155**	**248**	**224**	**147**
Rainfall A–O (mm)	**105**	**54**	**230**	**267**	**583**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 4: Tulloona desi chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	0.95		2.53	3.06	
PBA Drummond^{Ф}	105	Trial results below standard	108	128	Trial failed
CBA Captain^{Ф}	104		100	107	
Jimbour	99				
Kyabra^{Ф}	108		96	100	
PBA Seamer^{Ф}	88		104	95	
PBA Boundary^{Ф}	113		92	97	
PBA HatTrick^{Ф}	103		95	92	
Sowing date	**24 May**	**23 May**	**12 May**	**11 May**	**20 Jun**
Rainfall J–M (mm)	**96**	**97**	**263**	**419**	**225**
Rainfall A–O (mm)	**136**	**48**	**193**	**274**	**479**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 5: Walgett desi chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	1.15			3.85	
PBA Drummond^{Ф}	107	No trial	Trial results below standard	109	Compromised trial
PBA Boundary^{Ф}	115			106	
CBA Captain^{Ф}	104			106	
Jimbour	99				
PBA HatTrick^{Ф}	104			99	
Kyabra^{Ф}	111			92	
PBA Seamer^{Ф}	88			94	
Sowing date	**30 May**		**27 May**	**28 May**	**14 Jun**
Rainfall J–M (mm)	**51**		**248**	**272**	**231**
Rainfall A–O (mm)	**100**		**223**	**215**	**449**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 6: Coonamble kabuli chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			2.95	3.27	
Genesis™ 090	Trial failed	Trial failed	99	100	Trial failed
Almaz^{Ф}			99	99	
Genesis™ Kalkee			98	98	
PBA Royal^{Ф}			97	98	
PBA Magnus^{Ф}			95	99	
PBA Monarch^{Ф}			93	83	
Sowing date	**20 Jun**	**25 Jun**	**26 May**	**27 May**	**10 Jun**
Rainfall J–M (mm)	**77**	**155**	**248**	**224**	**147**
Rainfall A–O (mm)	**105**	**54**	**230**	**267**	**583**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 7: Tulloona kabuli chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	0.86		2.27	2.78	
Genesis™ 425	101	Trial results below standard			Trial failed
Genesis™ 090	108		97	101	
Almaz^{Ф}	96		102	99	
PBA Royal^{Ф}	104		97	96	
Genesis™ Kalkee	102		97	95	
PBA Magnus^{Ф}	91		98	85	
PBA Monarch^{Ф}	87		99	78	
Sowing date	**24 May**	**23 May**	**12 May**	**11 May**	**20 Jun**
Rainfall J–M (mm)	**96**	**97**	**263**	**419**	**225**
Rainfall A–O (mm)	**136**	**48**	**193**	**274**	**479**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 8: Walgett kabuli chickpea.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	1.06			4.17	
Genesis™ 090	106	No trial	Trial results below standard	107	Compromised trial
PBA Royal^{Ф}	103			103	
Genesis™ 425	101				
Genesis™ Kalkee	102			99	
Almaz^{Ф}	95			98	
PBA Magnus^{Ф}	92			95	
PBA Monarch^{Ф}	88			75	
Sowing date	**30 May**		**27 May**	**28 May**	**14 Jun**
Rainfall J–M (mm)	**51**		**248**	**272**	**231**
Rainfall A–O (mm)	**100**		**223**	**215**	**449**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

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 2023.

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 tolerance ratings.

Table 9: Chickpea disease guide for New South Wales.

Variety	Ascochyta blight (pathogen group 1 – south)	Ascochyta blight (pathogen group 2 – north)	Phytophthora root rot	RLN resistance (*Pratylenchus thornei*)	RLN tolerance (*Pratylenchus thornei*)	RLN resistance (*Pratylenchus neglectus*)	RLN tolerance (*Pratylenchus neglectus*)
DESI							
CBA Captain[Φ]	S	MS	S	MS	MT	MR	MT
Kyabra[Φ]	VS	VS	VS	S	MT	MRMS	MT
Neelam[Φ]	S	S		MS	MI	MRMS	MI
PBA Boundary[Φ]	S	S	VS	MRMS	MT	RMR	MI
PBA Drummond[Φ]	VS	VS	VS	MRMS	MT	MR	TMT
PBA HatTrick[Φ]	S	S	S	MRMS	MTMI	MRMS	MT
PBA Maiden[Φ]	S	S		MRMS	I	MRMS	MI
PBA Seamer[Φ]	S	MS	S	MRMS	MTMI	MRMS	MI
PBA Slasher[Φ]	S	S		MRMS	MT	MRMS	MI
PBA Striker[Φ]	S	S		MRMS	TMT	MRMS	MI
KABULI							
Almaz[Φ]	S	MS		S	IVI	MRMS	MII
Genesis™ 090	MS	MS		MSS	I	MRMS	IVI
Genesis™ Kalkee	S	S		MS	MI	MRMS	VI
PBA Magnus[Φ]	S	MS		MSS	I	MR	MII
PBA Monarch[Φ]	S	MS		MS	MII	MRMS	I
PBA Royal[Φ]	MS	MS		MS	MI	MR	VI

Learn more via the NVT Disease Ratings.
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.

FABA BEAN

Faba bean variety yield performance – Northern New South Wales

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are 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 Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

Table 1: Bellata faba bean.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)		0.56	1.63	2.36	2.33
FBA Ayla[Φ]	Trial failed	103	97	101	96
PBA Nanu[Φ]		99	95	96	96
PBA Warda[Φ]		112	92	102	86
PBA Nasma[Φ]		107	74	99	83
Cairo		114	78	100	76
Doza[Φ]		108	77	96	79
Sowing date	**10 May**	**29 Apr**	**23 Apr**	**21 May**	**4 May**
Rainfall J–M (mm)	**91**	**67**	**337**	**377**	**274**
Rainfall A–O (mm)	**108**	**81**	**227**	**372**	**589**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 2: Bullarah faba bean.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)				2.43	
PBA Nanu[Φ]	Trial failed	Trial failed	Trial failed	105	Trial failed
PBA Warda[Φ]				101	
FBA Ayla[Φ]				97	
Doza[Φ]				96	
Cairo				94	
PBA Nasma[Φ]				77	
Sowing date	**26 Apr**	**24 May**	**8 Apr**	**20 Apr**	**30 Apr**
Rainfall J–M (mm)	**203**	**50**	**377**	**422**	**216**
Rainfall A–O (mm)	**105**	**24**	**297**	**253**	**390**

Special thanks to 2022 trial cooperator, Rimanui Farms.
Learn more via the NVT Long Term Yield Reporter

Refer to the latest *Crop Sowing Guide* for further information at grdc.com.au/nvt-crop-sowing-guides

Table 3: Coonamble faba bean.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			2.75	3.91	2.24
FBA Ayla(Ф)	No trial	Trial results below standard	99	98	97
PBA Nanu(Ф)			92	101	92
PBA Warda(Ф)			95	98	80
PBA Nasma(Ф)			88	83	91
Cairo			86	92	73
Doza(Ф)			81	92	75
Sowing date		**23 Apr**	**25 Apr**	**23 Apr**	**22 Apr**
Rainfall J–M (mm)		**155**	**248**	**224**	**147**
Rainfall A–O (mm)		**54**	**230**	**267**	**583**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 4: Spring Ridge faba bean.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			2.74		
FBA Ayla(Ф)	Trial failed	Trial failed	99	Trial failed	Trial failed
PBA Warda(Ф)			96		
PBA Nanu(Ф)			96		
PBA Nasma(Ф)			95		
Cairo			92		
Doza(Ф)			90		
Sowing date	**3 Apr**	**17 May**	**20 Apr**	**20 Apr**	**10 May**
Rainfall J–M (mm)	**125**	**141**	**338**	**331**	**317**
Rainfall A–O (mm)	**217**	**112**	**392**	**286**	**628**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 5: Tulloona faba bean.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)			3.05	3.68	3.61
PBA Warda(Ф)	Trial failed	Compromised trial	103	102	106
FBA Ayla(Ф)			101	101	100
Cairo			101	98	103
PBA Nanu(Ф)			96	95	103
Doza(Ф)			97	93	101
PBA Nasma(Ф)			101	97	89
Sowing date	**20 Apr**	**23 May**	**27 Apr**	**11 May**	**29 Apr**
Rainfall J–M (mm)	**96**	**97**	**263**	**419**	**215**
Rainfall A–O (mm)	**136**	**48**	**193**	**274**	**475**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Table 6: Walgett faba bean.

Year	2018	2019	2020	2021	2022
Mean yield (t/ha)	0.72		2.01	4.20	4.81
FBA Ayla(Ф)	106	No trial	102	100	97
PBA Nanu(Ф)	84		87	99	104
PBA Nasma(Ф)	97		103	95	94
PBA Warda(Ф)	121		98	101	87
Cairo	113		93	98	86
Doza(Ф)	89		84	96	95
Sowing date	**15 May**		**24 Apr**	**24 Apr**	**20 Apr**
Rainfall J–M (mm)	**51**		**248**	**272**	**231**
Rainfall A–O (mm)	**100**		**223**	**215**	**449**

Special thanks to 2022 trial cooperator - permission to publish was not received.
Learn more via the NVT Long Term Yield Reporter

Faba bean variety disease ratings – New South Wales

The following table contains varietal ratings for the predominant diseases of faba bean in New South Wales. These ratings are updated annually by crop pathologists and were released in March 2023.

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 tolerance ratings.

Table 7: Faba bean disease guide for New South Wales.

Variety	Ascochyta blight	Cercospora leaf spot	Chocolate spot (Botrytis)	RLN resistance (*Pratylenchus thornei*)	Leaf rust
Cairo	VS	S	S	MSS	S
Doza[Ф]	VS	S	S	MSS	MR
Farah[Ф]	S	S	S	MS	VS
FBA Ayla[Ф]		S	S	MS	MR
Fiesta VF	S	S	S	MS	VS
Nura[Ф]	MR (P)	S	MS	MS	VS
PBA Amberley[Ф]	MR	S	MRMS	MS	VS
PBA Bendoc[Ф]	MR	S	S	MRMS	VS
PBA Marne[Ф]	MS (P)	S	MS (P)	MS	MRMS
PBA Nanu[Ф]		S	S	MS	MR
PBA Nasma[Ф]	S	S	S	MSS	MRMS
PBA Rana[Ф]	MRMS	S	MS	MS	VS
PBA Samira[Ф]	MR (P)	S	MS	MRMS	S
PBA Warda[Ф]	S	S	S	MRMS	MRMS

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating.

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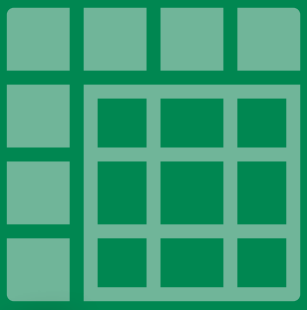

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