



NVT HARVEST REPORT



REVISED MAY 2024

**Southern Queensland
Northern Region**



Title: NVT Harvest Report – Southern Queensland

Published: Revised May 2024

Authors:

Katherine Hollaway, Astute Ag and
Dr Sue Knights, SE Knights Consulting

Acknowledgements:

We would like to thank all those who provided information and assistance with the development of this Harvest Report.

© Grains Research and Development Corporation 2024

This book is copyright. Except as permitted under the *Copyright Act 1968* (Commonwealth) and subsequent amendments, no part of this publication may be reproduced, stored or transmitted in any form or by any means, electronic or otherwise, without the specific written permission of the copyright owner.

GRDC contact details:

PO Box 5367
KINGSTON ACT 2604

Phone: 02 6166 4500

Email: comms@grdc.com.au

Design and production:

Coretext, www.coretext.com.au

COVER: John Nairn, South Australian Research and Development Institute (SARDI-PIRSA), harvesting the barley National Variety Trial site at the SARDI Turretfield Research Centre, Rosedale, SA, 2023.

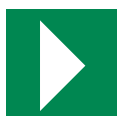
PHOTO: Trevor Garnett, GRDC

DISCLAIMER: Any recommendations, suggestions or opinions contained in this publication do not necessarily represent the policy or views of the Grains Research and Development Corporation. No person should act on the basis of the content of this publication without first obtaining specific, independent professional advice.

The Grains Research and Development Corporation will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information in this publication.



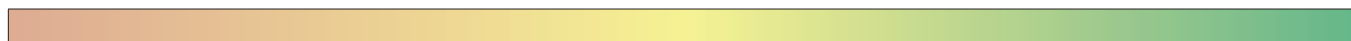
CONTENTS



Download this guide at:
nvt.grdc.com.au/harvest-reports

INTRODUCTION	4
WHEAT	6
BARLEY	19
CHICKPEA	24
FABA BEAN	26
USEFUL NVT TOOLS	28

LEGEND: MEAN VARIETY YIELD PERFORMANCE

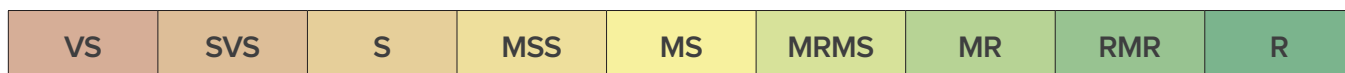


LOW

HIGH

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

DISEASE RATING COLOUR RANGE



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
nvt.grdc.com.au/resources/crop-sowing-guides

INTRODUCTION

The NVT Harvest Report - Southern Queensland provides information to support growers and advisers with decisions on variety selection for **Southern Queensland**. 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 2023 and long-term yield performance of varieties of crop species suitable for production in **Southern Queensland** 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 recognises that sustaining a project of this nature hinges on the collaboration of growers who willingly provide sites and often lend a hand in trial management on their properties. Equally significant is the partnership with seed companies who supply seed of commercial varieties and experimental lines to the program.

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 Analytics for the Australian Grains Industry (AAGI).

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 the *NVT Harvest Report - Southern Queensland*, 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 **Southern Queensland**.

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](#).

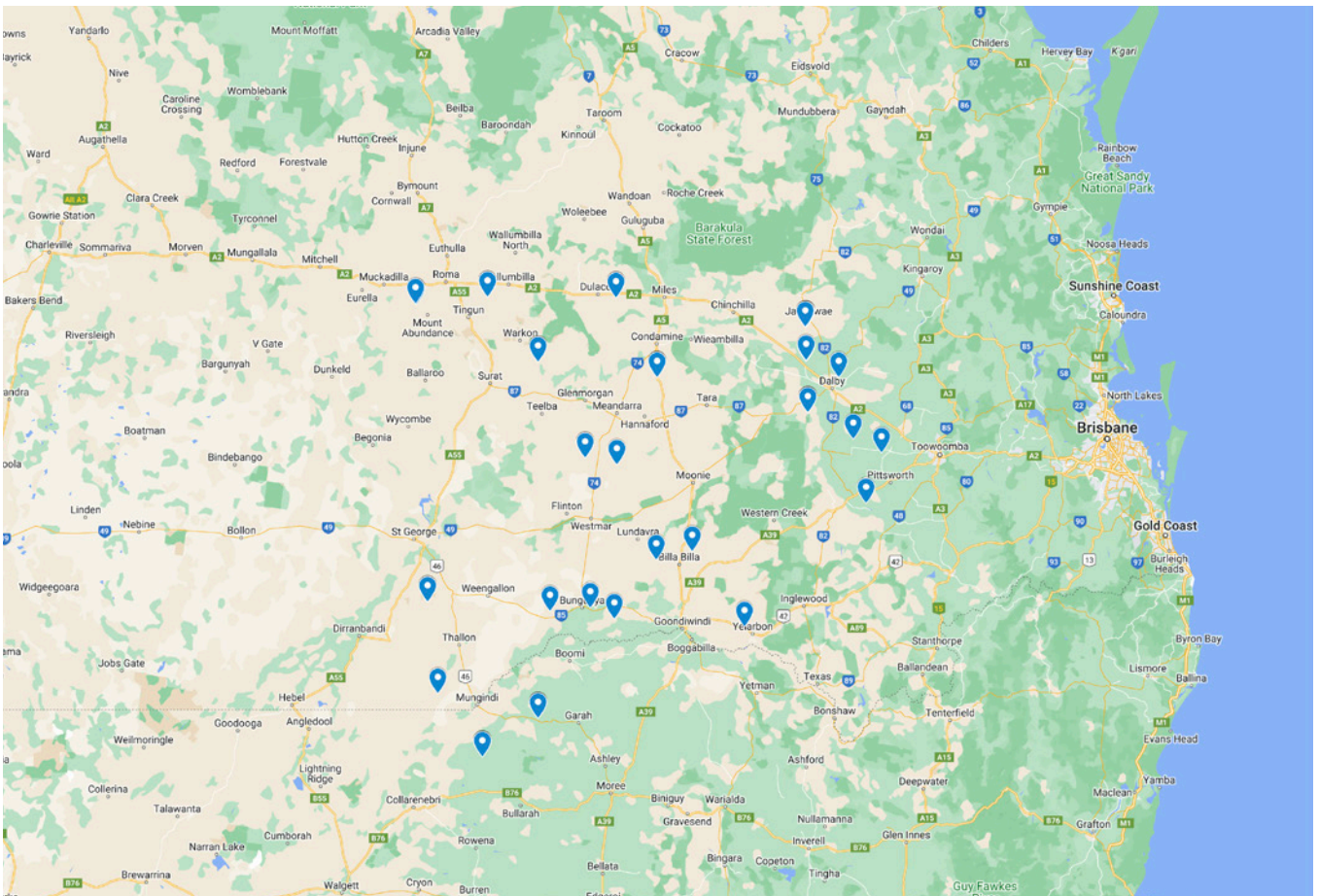
Trials listed as compromised are not suitable for making variety decisions. Results can be found in the [Quarantined trial reports](#).

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

NVT SITE LOCATIONS – Southern Queensland

Figure 1: Locality of NVT trial sites in Southern Queensland from 2019 to 2023.

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. Please go to nvt.grdc.com.au to find trial results for any new varieties released since the publication of this harvest report.

Variety	Breeding company	Grain classification	End point royalty* (\$)	Comments supplied by breeding company ¹
Genie [®]	InterGrain	TBC	3.50	Genie [®] is a mid-slow maturing wheat and is an excellent alternative to RockStar [®] in greater than three-tonne-per-hectare yield environments. In these environments, the variety offers medium-high rainfall growers a yield improvement compared with RockStar [®] . Genie [®] , with its slightly later maturity than RockStar [®] and long coleoptile, enables earlier sowing opportunities to be maximised. Genie [®] has an excellent disease resistance package including useful stem rust and stripe rust resistances. It offers good test weight, moderate grain size and has a medium plant height. Preliminary internal data indicates Genie [®] has good sprouting tolerance. Genie [®] has an AH classification in the western and southern zones and an AH classification is expected for the south-eastern and northern zones in 2024.
Leverage [®]	Australian Grain Technologies	APH	4.00	Replacement for EGA Gregory [®] , Coolah [®] and LRPB Flanker [®] . Very high yielding in the early planting window. APH quality classification in the northern zone, with south-eastern zone classification pending. Good resistance to major diseases. Mid-slow maturity, suited to late April/early May planting. Good yellow spot resistance. Good physical grain quality characteristics. Shorter plant type than other EGA Gregory [®] -type varieties.
LRPB Tracer [®]	LongReach Plant Breeders		4.25	Mid-spring maturing variety (similar to LRPB Reliant [®] and Suntop [®]) suitable for main season seeding opportunities across NSW and Queensland. Strong performance in sodic soil yield trials combined with a good disease package for northern production systems and excellent RLN (<i>Pratylenchus thornei</i>) tolerance. Compact canopy (similar plant height to LRPB Lancer [®]), which can aid in stubble management in zero-till farming systems. APH south east (Southern NSW) northern classification (Northern NSW and Queensland) expected prior to sowing in 2024. Marketed by Pacific Seeds.
SEA Peel	Seed Exchange Australia	FEED	2.50	A quick spring variety with yield potential to varieties in this maturity group. Consistently low screenings. Useful levels of resistance to soil-borne pathogens. Strong rust resistance package. Final milling classification anticipated in 2024.
SEA Stockman	Seed Exchange Australia	FEED	3.00	An awnless hay wheat. Its quick maturity relative to other hay wheats allows SEA Stockman to be sown relatively late and harvested early to allow a summer crop. Excellent standability. Good rust resistance package. Large kernel size.
Sundancer [®]	Australian Grain Technologies	APH	4.00	An ideal replacement for LRPB Lancer [®] . Very high yielding, with excellent yield stability. Suits late April, early May planting. Excellent rust resistance. Medium-short plant type with better straw strength than LRPB Lancer [®] . Longer coleoptile than LRPB Lancer [®] and other early season varieties. APH classification for the northern zone, with southern eastern zone pending.

* EPR amount is ex-GST, [®] denotes Plant Breeder's Rights apply. ¹ All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

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

Wheat variety yield performance – Southern Queensland

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: Brookstead main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.18	4.37			4.71
Vixen ^{db}			Compromised trial	Compromised trial	107
Jillaroo ^{db}					105
Calibre ^{db}					108
Boree ^{db}		99			108
SUN1081A ^{db}					106
Borlaug 100 ^{db}	102	110			105
LRPB Mustang ^{db}	111	107			101
Suncentral ^{db}	107	104			105
Rebel Rat		106			105
Brumby ^{db}					106
Sunmaster ^{db}	107	102			105
Sunblade CL Plus ^{db*}	110	102			103
Sunprime ^{db}	108	107			99
LRPB Tracer ^{db}					101
RockStar ^{db}					105
Sowing date	14 Jun	11 Jun	1 Jun	17 Jun	31 May
Rainfall J–M (mm)	109	289	304	429	140
Rainfall A–O (mm)	50	237	252	506	143

Special thanks to 2023 trial cooperator.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 2: Condamine main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.03	4.30	5.03	2.49
Leverage ^{db}					100
IGW5485					100
SUN1081A ^{db}				119	97
Sunmaster ^{db}		102	111	120	96
Suncentral ^{db}		103	110	118	96
Sundancer ^{db}					100
Sunblade CL Plus ^{db*}		101	112	111	98
LRPB Raider ^{db}		100	105	114	102
Brumby ^{db}					100
Suntop ^{db}		101	102	113	98
Rebel Rat		101	105	108	98
Sunchaser ^{db}		102	99	113	97
Rebel 65 ^{db}					101
Borlaug 100 ^{db}		103	104	106	98
LRPB Reliant ^{db}		105	102	105	101
Sowing date	11 Jun	26 May	10 May	31 May	26 May
Rainfall J–M (mm)	105	224	302	251	161
Rainfall A–O (mm)	32	146	284	510	82

Special thanks to 2023 trial cooperator, Culara Farming.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 3: Dulacca main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.54	2.27	3.59		2.44
SUN1081A ^{db}				Compromised trial	129
Suncentral ^{db}	123	113	115		125
Sunmaster ^{db}	120	111	116		119
LRPB Mustang ^{db}	120	109	105		130
Sunblade CL Plus ^{db*}	116	111	114		112
Jillaroo ^{db}			108		109
Sunprime ^{db}	115	110	106		119
Borlaug 100 ^{db}	112	118	113		102
Calibre ^{db}			110		105
Sunchaser ^{db}	115	104	106		119
Suntop ^{db}	113	103	107		116
Rebel Rat		113	111		99
LRPB Hellfire ^{db}	109	103	103		113
Vixen ^{db}			100		112
Brumby ^{db}					97
Sowing date	15 May	18 Jun	11 May	2 Jun	9 May
Rainfall J–M (mm)	114	454	263	184	82
Rainfall A–O (mm)	74	120	229	331	98

Special thanks to 2023 trial cooperator, Alex Nixon and family.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 4: Lundavra main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			3.02	4.60	3.74
SUN1081A ^{db}				105	110
Suncentral ^{db}			113	113	109
Sunmaster ^{db}			111	115	108
Sunblade CL Plus ^{db*}			111	111	107
Borlaug 100 ^{db}			109	105	109
Calibre ^{db}			116	99	109
Rebel Rat			105	107	107
Suntop ^{db}			105	107	103
Sunchaser ^{db}			105	106	104
Brumby ^{db}					104
LRPB Mustang ^{db}			114	97	107
Jillaroo ^{db}			120	91	109
Leverage ^{db}					99
Sunprime ^{db}			113	96	106
IGW5485					98
Sowing date	6 Jun	13 May	14 May	8 May	12 May
Rainfall J–M (mm)	64	115	209	383	145
Rainfall A–O (mm)	54	117	175	386	136

Special thanks to 2023 trial cooperator.
 * herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT
 BARLEY
 CHICKPEA
 FABABEAN

Table 5: Macalister main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.34	3.27			3.01
Borlaug 100 ^{db}	113	122	Compromised trial	Compromised trial	105
SUN1081A ^{db}					110
Rebel Rat		115			106
Jillaroo ^{db}					106
Calibre ^{db}					108
Suncentral ^{db}	107	110			109
SEA Condamine	110	114			102
Sunmaster ^{db}	107	106			110
Sunblade CL Plus ^{db*}	108	104			109
Sunprime ^{db}	105	111			100
Brumby ^{db}					108
LRPB Mustang ^{db}	102	111			100
Rebel 65 ^{db}					100
Sunchaser ^{db}	103	108			100
IGW5485					106
Sowing date	15 Jun	10 Jun			27 May
Rainfall J–M (mm)	129	282	277	268	112
Rainfall A–O (mm)	56	144	282	401	74

Special thanks to 2023 trial cooperator.

* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 6: Mungindi main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.50	3.11	5.09		2.79
Borlaug 100 ^{db}	116	108	100	Compromised trial	112
SUN1081A ^{db}					107
Rebel Rat		106	100		110
Suncentral ^{db}	110	106	102		107
Sunmaster ^{db}	109	105	102		107
Sunblade CL Plus ^{db*}	107	106	102		105
SEA Condamine	110	104	100		109
Jillaroo ^{db}			100		105
Calibre ^{db}			100		106
Brumby ^{db}					104
Sunprime ^{db}	105	106	99		102
Rebel 65 ^{db}					107
Sunchaser ^{db}	106	102	100		103
Suntop ^{db}	104	102	101		102
IGW5485					103
Sowing date	14 May	14 May	13 May		16 Jun
Rainfall J–M (mm)	80	365	377	206	155
Rainfall A–O (mm)	42	221	286	510	49

Special thanks to 2023 trial cooperator.

* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 7: Nindigully main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.02	3.32		2.50
Jillaroo ^{db}	Trial failed		113	Trial failed	103
Borlaug 100 ^{db}		116	106		109
Calibre ^{db}			112		105
SUN1081A ^{db}					105
Vixen ^{db}			112		101
Rebel Rat		110	104		108
Sunprime ^{db}		112	106		101
Suncentral ^{db}		107	106		105
LRPB Mustang ^{db}		111	106		100
Sunblade CL Plus ^{db*}		106	107		104
SEA Condamine		109	101		107
Sunmaster ^{db}		105	106		105
SEA Stockman		111	101		99
Brumby ^{db}					104
Boree ^{db}		101	108		100
Sowing date		14 May	25 May		12 May
Rainfall J–M (mm)	23	290	291	196	88
Rainfall A–O (mm)	57	149	159	507	33

Special thanks to 2023 trial cooperator, Malanga Pastoral.

* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 8: Roma main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			3.17		
LRPB Raider ^{db}	No trial	Trial failed	115	Compromised trial	Trial failed
LRPB Reliant ^{db}			110		
Sunmaster ^{db}			108		
Suncentral ^{db}			107		
Sunblade CL Plus ^{db*}			107		
DS Faraday ^{db}			106		
Catapult ^{db}			105		
Suntop ^{db}			105		
LRPB Hellfire ^{db}			103		
Coota ^{db}			103		
LRPB Flanker ^{db}			103		
Sunchaser ^{db}			102		
Jillaroo ^{db}			100		
Calibre ^{db}			100		
Rebel Rat			100		
Sowing date					
Rainfall J–M (mm)		404	280	129	72
Rainfall A–O (mm)		135	141	404	98

Special thanks to 2023 trial cooperator, Shaun Nolan.

* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 9: Westmar main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		2.01	4.30		2.01
SUN1081A [Ⓛ]	No trial			Compromised trial	118
Jillaroo [Ⓛ]			105		109
Suncentral [Ⓛ]		102	103		116
Leverage [Ⓛ]					102
LRPB Mustang [Ⓛ]		97	104		118
Calibre [Ⓛ]			104		107
Sunmaster [Ⓛ]		104	102		113
Brumby [Ⓛ]					101
Catapult [Ⓛ]			103		97
Sunblade CL Plus ^{Ⓛ*}		106	101		109
Sundancer [Ⓛ]					102
Sunprime [Ⓛ]		101	102		111
LRPB Reliant [Ⓛ]		116	101		98
Vixen [Ⓛ]			106		113
Coota [Ⓛ]		110	101		98
Sowing date		25 May	14 May	1 Jun	29 May
Rainfall J–M (mm)		307	209	383	67
Rainfall A–O (mm)		139	175	386	112

Special thanks to 2023 trial cooperator.

* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 10: Yelarbon main season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.50	3.94		3.08
Sunmaster [Ⓛ]	No trial	102	118	Compromised trial	124
Sunblade CL Plus ^{Ⓛ*}		106	113		119
Suncentral [Ⓛ]		97	116		122
Rebel Rat		104	112		115
Brumby [Ⓛ]					110
IGW5485					108
Borlaug 100 [Ⓛ]		104	111		114
SUN1081A [Ⓛ]					114
Calibre [Ⓛ]			107		111
Leverage [Ⓛ]					107
LRPB Raider [Ⓛ]			112		104
SEA Condamine			106		105
Rebel 65 [Ⓛ]					99
Jillaroo [Ⓛ]					100
Suntop [Ⓛ]			96		105
Sowing date		13 May	21 May	18 Jun	13 May
Rainfall J–M (mm)		236	295	265	197
Rainfall A–O (mm)		199	304	421	159

Special thanks to 2023 trial cooperator, Paul & Heath McNulty.

* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 11: Brookstead early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	3.15			4.78	
Leverage [Ⓛ]		Compromised trial	No trial	118	No trial
LRPB Raider [Ⓛ]				108	
SUN1081A [Ⓛ]				107	
Sundancer [Ⓛ]				114	
Coota [Ⓛ]	115			103	
Coolah [Ⓛ]	112			102	
Sunflex [Ⓛ]	105			106	
LRPB Stealth [Ⓛ]	114			98	
Sunmax [Ⓛ]	109			101	
DS Faraday [Ⓛ]	112			96	
EGA Gregory [Ⓛ]	110			95	
LRPB Flanker [Ⓛ]	104			95	
LRPB Lancer [Ⓛ]	110			91	
LRPB Reliant [Ⓛ]	112			89	
RGT Zanzibar	46			124	
Sowing date	10 May	1 Jun		29 Apr	
Rainfall J–M (mm)	109	289		429	
Rainfall A–O (mm)	50	237		506	

No 2023 trial cooperator.

Learn more via the [NVT Long Term Yield Reporter](#)

Table 12: Condamine early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.63	3.13	4.61	5.72	3.23
Leverage [Ⓛ]				110	109
Jumbuck [Ⓛ]					109
SUN1081A [Ⓛ]				103	116
Sundancer [Ⓛ]				105	110
LRPB Raider [Ⓛ]		113	110	109	104
Brumby [Ⓛ]					108
RockStar [Ⓛ]			112		103
Coolah [Ⓛ]	100	109	107	103	105
Coota [Ⓛ]	103	107	108	103	103
LRPB Stealth [Ⓛ]	105	108	107	99	107
Sunflex [Ⓛ]	99	103		103	101
DS Faraday [Ⓛ]	96	111	97	104	105
EGA Gregory [Ⓛ]	98	110		101	107
LRPB Flanker [Ⓛ]	99	109	100	98	109
Rebel 65 [Ⓛ]				100	111
Sowing date	30 Apr	16 May	29 Apr	26 Apr	5 May
Rainfall J–M (mm)	105	224	302	251	161
Rainfall A–O (mm)	32	146	284	510	82

Special thanks to 2023 trial cooperator, Culara Farming.

Learn more via the [NVT Long Term Yield Reporter](#)

Table 13: Dulacca early season wheat.

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)	1.43		3.56	5.39	2.22	
Sundancer ^{db}		Trial failed		114	133	
Leverage ^{db}				117	126	
SUN1081A ^{db}				109	135	
Jumbuck ^{db}					114	
RockStar ^{db}				113		131
LRPB Raider ^{db}				117	106	110
Coota ^{db}	109			111	102	116
LRPB Stealth ^{db}	112			109	99	121
Sunflex ^{db}	106				104	109
Coolah ^{db}	103			111	102	112
LRPB Lancer ^{db}	118			99	93	119
Rebel 65 ^{db}					106	93
LRPB Flanker ^{db}	99			103	98	107
Brumby ^{db}						128
EGA Gregory ^{db}	87				96	96
Sowing date	29 Apr	16 May	29 Apr	28 Apr	26 Apr	
Rainfall J–M (mm)	114	454	263	184	82	
Rainfall A–O (mm)	74	120	229	331	98	

Special thanks to 2023 trial cooperator, Alex Nixon and family.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 14: Lundavra early season wheat.

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)			3.34	4.42	4.03	
Leverage ^{db}		Trial failed		110	110	
Jumbuck ^{db}						107
SUN1081A ^{db}					105	115
Sundancer ^{db}					107	113
LRPB Raider ^{db}				114	107	104
RockStar ^{db}				108		109
Coota ^{db}				108	103	105
Coolah ^{db}				108	103	105
Brumby ^{db}						109
LRPB Stealth ^{db}				105	100	108
Sunflex ^{db}					103	103
LRPB Flanker ^{db}				102	99	105
Rebel 65 ^{db}					100	103
EGA Gregory ^{db}					100	101
DS Faraday ^{db}				103	101	99
Sowing date	24 Apr	28 Apr	26 Apr	30 Apr	25 Apr	
Rainfall J–M (mm)	64	115	209	383	145	
Rainfall A–O (mm)	54	117	175	386	136	

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 15: Macalister early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.62	3.61			4.31
SUN1081A ^{db}			Compromised trial	No trial	117
Jumbuck ^{db}					115
Leverage ^{db}					114
Sundancer ^{db}					113
Brumby ^{db}					109
LRPB Raider ^{db}		110			109
LRPB Flanker ^{db}	102	112			106
Rebel 65 ^{db}					106
Coolah ^{db}	104	108			107
LRPB Stealth ^{db}	101	110			107
EGA Gregory ^{db}	103	110			105
DS Faraday ^{db}	105	109			104
Coota ^{db}	103	106			106
RockStar ^{db}					106
Sunflex ^{db}	102	102			103
Sowing date	7 May	28 May	10 May		4 May
Rainfall J–M (mm)	129	282	277		112
Rainfall A–O (mm)	56	144	282		74

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 16: Mungindi early season wheat.

Year	2019	2020	2021	2022	2023	
Mean yield (t/ha)		2.83	4.34		3.14	
Leverage ^{db}		Trial failed		Trial failed	111	
Jumbuck ^{db}					106	
Sundancer ^{db}					111	
SUN1081A ^{db}					105	
LRPB Raider ^{db}			125		102	103
RockStar ^{db}					102	108
Coota ^{db}			116		101	104
Sunflex ^{db}			110			105
Brumby ^{db}						97
Coolah ^{db}			116		99	102
LRPB Stealth ^{db}			114		97	101
Sunmax ^{db}			98		107	94
DS Faraday ^{db}			112		96	92
Genie ^{db}						94
EGA Gregory ^{db}			110			93
Sowing date	24 Apr	29 Apr	27 Apr	7 May	28 Apr	
Rainfall J–M (mm)	80	365	377	206	155	
Rainfall A–O (mm)	42	221	286	510	49	

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 17: Nindigully early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.22	3.83		2.89
SUN1081A ^{db}	Trial failed			Trial failed	111
Leverage ^{db}					110
Jumbuck ^{db}					108
Sundancer ^{db}					111
Brumby ^{db}					103
LRPB Raider ^{db}		124	110		104
RockStar ^{db}			112		106
LRPB Stealth ^{db}		115	108		105
Coolah ^{db}		116	107		104
Coota ^{db}		112	108		104
LRPB Flanker ^{db}		117	102		102
Sunflex ^{db}		107			103
EGA Gregory ^{db}		117			99
DS Faraday ^{db}		119	99		98
Rebel 65 ^{db}					102
Sowing date	14 May	30 Apr	28 Apr	27 Apr	28 Apr
Rainfall J–M (mm)	23	290	291	196	88
Rainfall A–O (mm)	57	149	159	507	33

Special thanks to 2023 trial cooperator, Malanga Pastoral.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 18: Roma early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			2.95	4.93	
Leverage ^{db}	Trial failed	Trial failed		112	No trial
LRPB Raider ^{db}			125	110	
SUN1081A ^{db}				107	
Sundancer ^{db}				105	
DS Faraday ^{db}			109	108	
Sunmax ^{db}			103	110	
Coolah ^{db}			113	104	
Rebel 65 ^{db}				106	
Coota ^{db}			112	102	
EGA Gregory ^{db}				105	
LRPB Nighthawk ^{db}			100	108	
Sunflex ^{db}				102	
LRPB Flanker ^{db}			105	102	
LRPB Stealth ^{db}			107	99	
LRPB Reliant ^{db}			102	101	
Sowing date	1 May	15 May	30 Apr	28 Apr	
Rainfall J–M (mm)	63	404	280	129	
Rainfall A–O (mm)	106	135	141	404	

No 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 19: Westmar early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		2.17	4.56	3.54	2.10
Jumbuck ^{db}	Trial failed				113
Leverage ^{db}				110	121
SUN1081A ^{db}				103	130
LRPB Raider ^{db}		114	105	113	111
Sundancer ^{db}				100	125
Brumby ^{db}					128
DS Faraday ^{db}		114	100	113	97
Coolah ^{db}		107	103	104	112
Coota ^{db}		104	103	101	114
EGA Gregory ^{db}		110		107	101
LRPB Stealth ^{db}		102	103	96	118
RockStar ^{db}			103		125
LRPB Flanker ^{db}		105	102	101	108
Sunflex ^{db}		102		102	107
Rebel 65 ^{db}				106	96
Sowing date	30 Apr	30 Apr	28 Apr	26 Apr	27 Apr
Rainfall J–M (mm)	84	307	209	383	67
Rainfall A–O (mm)	36	139	175	386	112

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 20: Yelarbon early season wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.61	4.35	5.03	3.00
Leverage ^{db}	No trial			114	122
Jumbuck ^{db}					117
Sundancer ^{db}				113	122
SUN1081A ^{db}				105	125
LRPB Raider ^{db}		119	118	103	112
Coota ^{db}		104	112	102	112
RockStar ^{db}			115		118
Sunflex ^{db}		105		104	107
Coolah ^{db}		107	109	100	110
LRPB Stealth ^{db}		99	104	99	112
LRPB Nighthawk ^{db}		118	98	109	78
Rebel 65 ^{db}				100	98
Sunmax ^{db}		114	101	95	85
DS Faraday ^{db}		112	95	92	99
LRPB Flanker ^{db}		103	94	95	105
Sowing date		29 Apr	26 Apr	30 Apr	26 Apr
Rainfall J–M (mm)		236	295	265	197
Rainfall A–O (mm)		199	304	421	159

Special thanks to 2023 trial cooperator, Paul & Heath McNulty.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 21: Lundavra durum wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			2.62	4.37	3.34
Patron ^{db}	Trial failed	Trial failed	116		117
Bitalli ^{db}			107	109	106
DBA Mataroi ^{db}			108	108	106
Westcourt ^{db}			107	109	104
DBA-Aurora ^{db}			95	105	95
DBA Vittaroi ^{db}			98	97	94
DBA Lillaroi ^{db}			99	89	101
Caparoi ^{db}			95	95	94
DBA Bindaroi ^{db}			94	97	92
DBA-Artemis ^{db}			89	100	90
Sowing date	6 Jun	13 May	14 May	8 May	12 May
Rainfall J–M (mm)	64	115	209	383	145
Rainfall A–O (mm)	54	117	175	386	136

Special thanks to 2023 trial cooperator.
 Learn more via the [NVT Long Term Yield Reporter](#)

Table 22: Macalister durum wheat.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.78	4.02		5.09	2.62
Patron ^{db}			Compromised trial		126
DBA Mataroi ^{db}	104	103		105	108
Bitalli ^{db}	107			103	110
Westcourt ^{db}	102	102		104	107
Jandaroi ^{db}	96	108		98	90
DBA Lillaroi ^{db}	99	104		98	95
DBA-Aurora ^{db}	101	94		97	101
DBA Vittaroi ^{db}	86	97		101	88
Caparoi ^{db}	92	97		98	91
DBA Bindaroi ^{db}	91	95		98	90
Sowing date	15 Jun	10 Jun	27 May	21 Jun	11 May
Rainfall J–M (mm)	129	282	277	268	112
Rainfall A–O (mm)	56	144	282	401	74

Special thanks to 2023 trial cooperator.
 Learn more via the [NVT Long Term Yield Reporter](#)

Wheat variety quality – Southern Queensland

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 2022 and 2023 NVT averaged for trials in the Southern Queensland 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 two NVT sites in Southern Queensland in 2022.

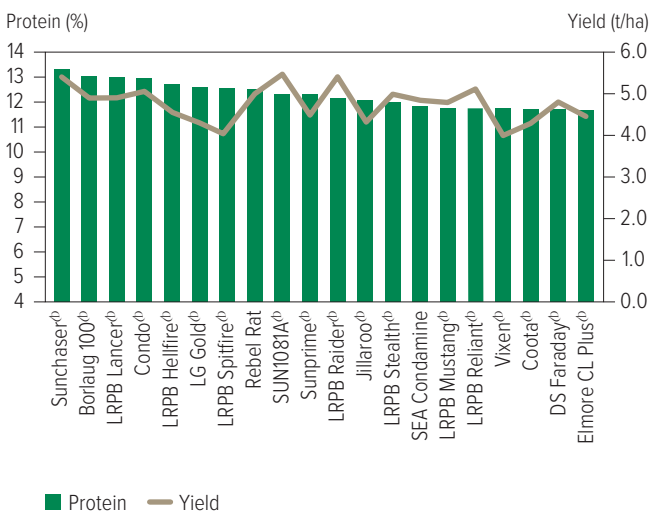


Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from nine NVT sites in Southern Queensland in 2023.

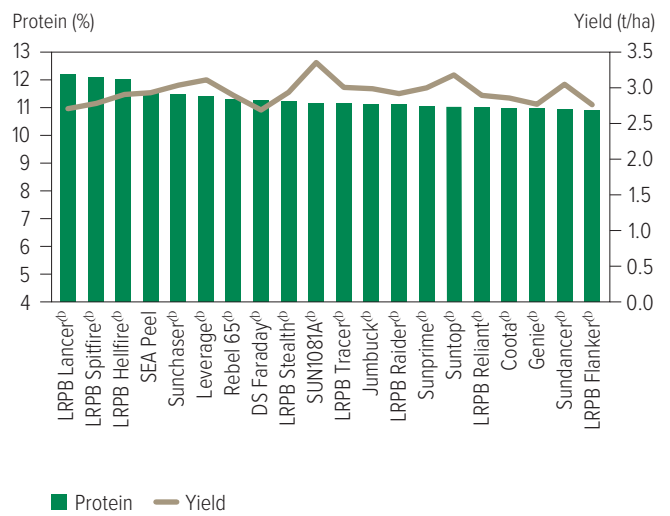


Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from seven NVT sites in Southern Queensland in 2022.

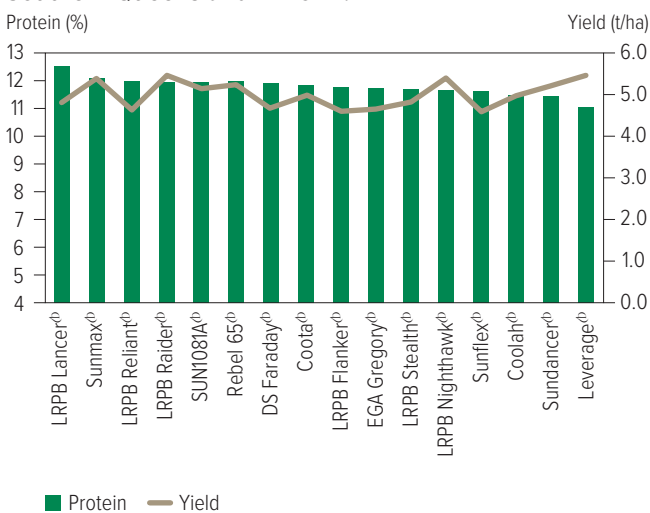
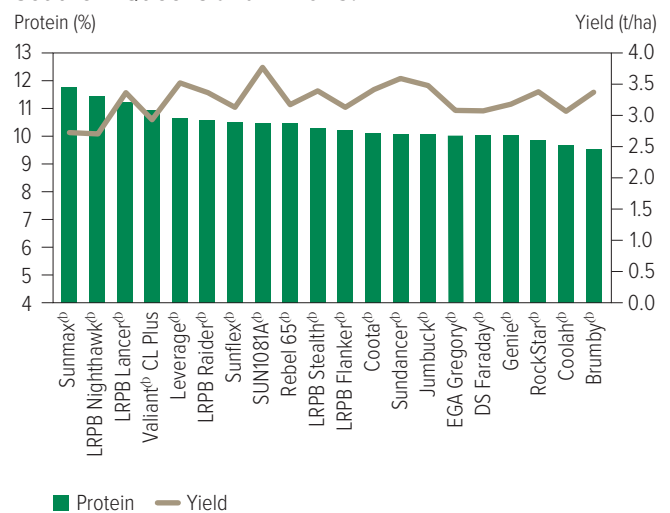


Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from eight NVT sites in Southern Queensland in 2023.



WHEAT

BARLEY

CHICKPEA

FABA BEAN

Figure 5: Protein (%) and yield (t/ha) comparisons for durum wheat varieties from two NVT sites in Southern Queensland in 2022.

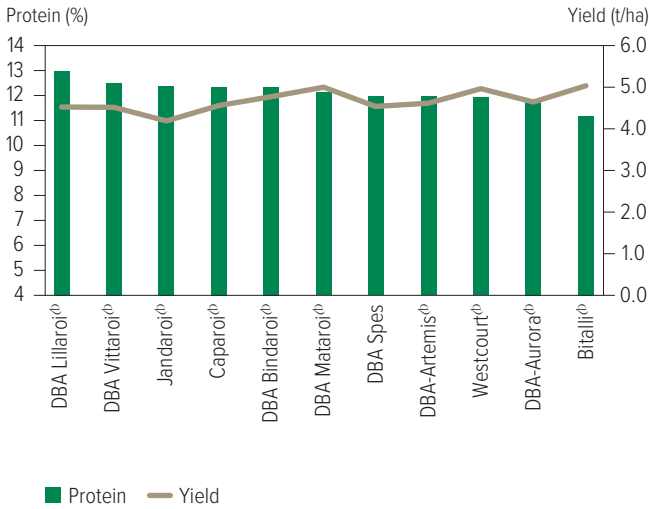
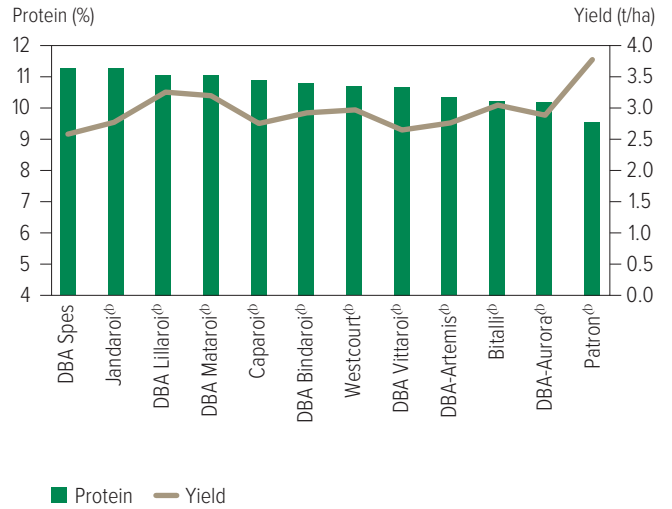


Figure 6: Protein (%) and yield (t/ha) comparisons for durum wheat varieties from two NVT sites in Southern Queensland in 2023.



Test weight comparisons

Figure 7: Test weight (kg/hL) comparisons for main season wheat varieties from two NVT sites in Southern Queensland in 2022.

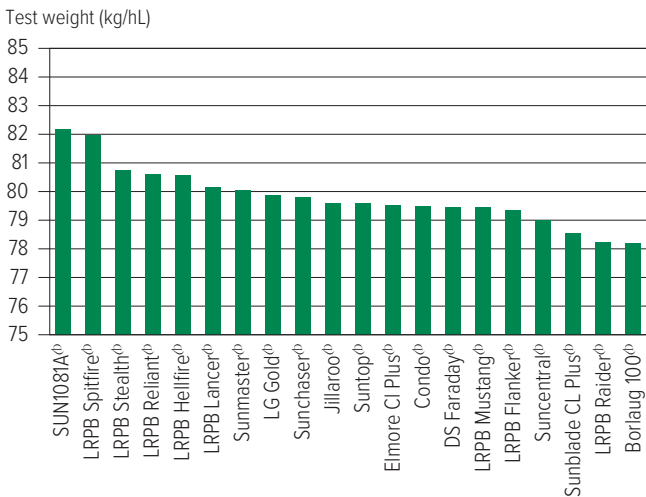


Figure 8: Test weight (kg/hL) comparisons for main season wheat varieties from nine NVT sites in Southern Queensland in 2023.

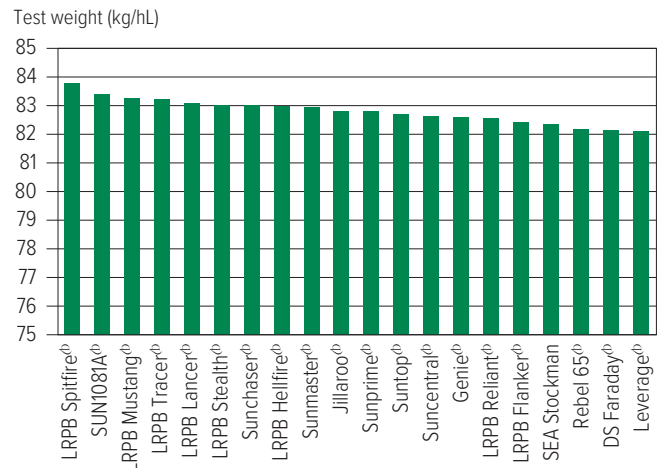


Figure 9: Test weight (kg/hL) comparisons for early season wheat varieties from seven NVT sites in Southern Queensland in 2022.

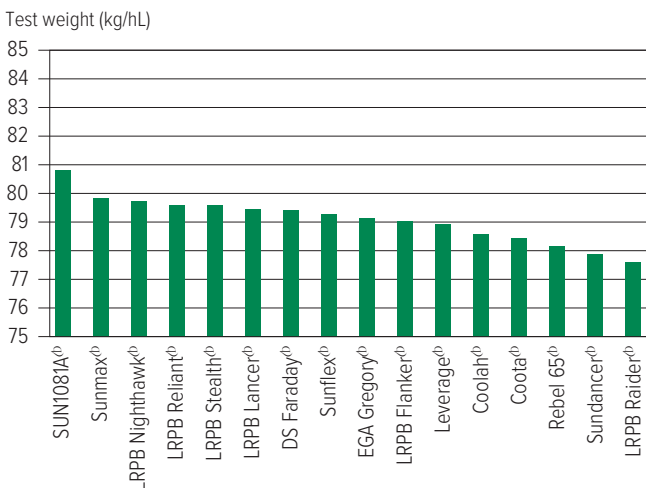


Figure 10: Test weight (kg/hL) comparisons for early season wheat varieties from eight NVT sites in Southern Queensland in 2023.

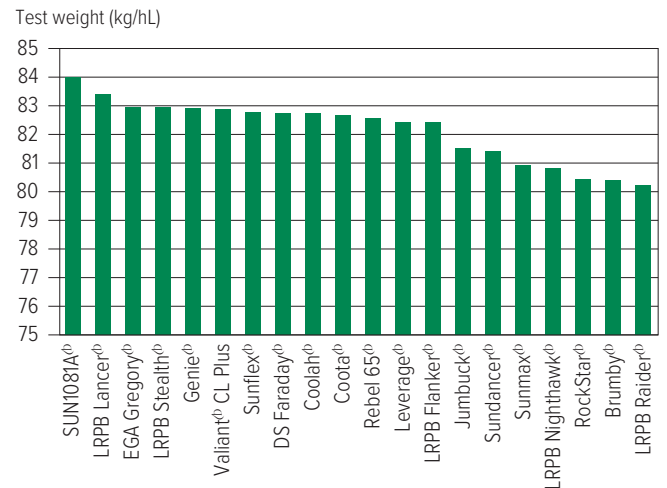


Figure 11: Test weight (kg/hL) comparisons for durum wheat varieties from two NVT sites in Southern Queensland in 2022.

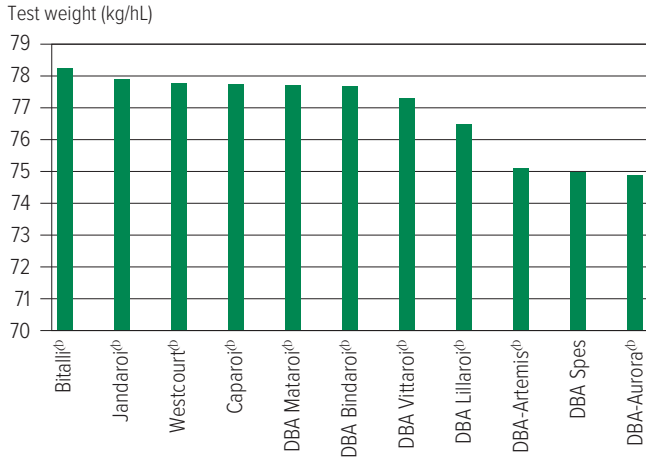
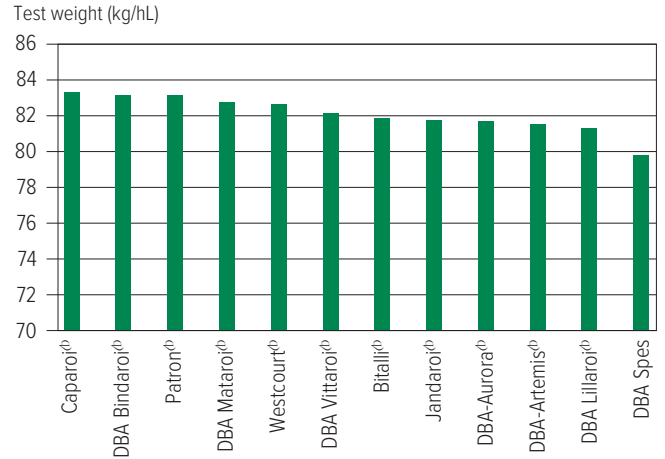


Figure 12: Test weight (kg/hL) comparisons for durum wheat varieties from two NVT sites in Southern Queensland in 2023.



Screenings comparisons

Figure 13: Screenings (<2.0mm) comparisons for main season wheat varieties from two NVT sites in Southern Queensland in 2022.

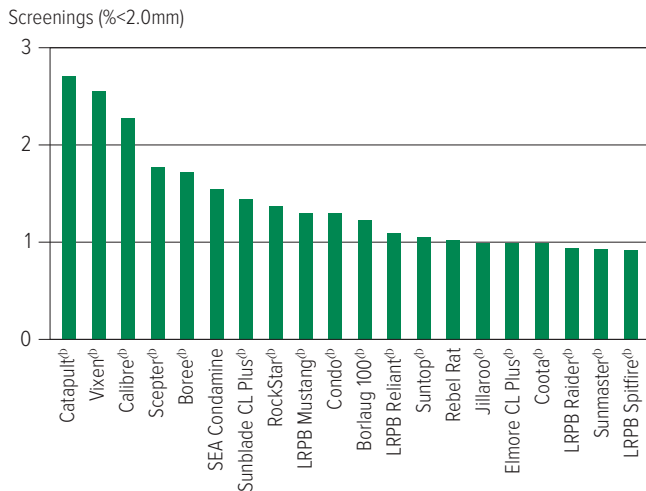


Figure 14: Screenings (<2.0mm) comparisons for main season wheat varieties from nine NVT sites in Southern Queensland in 2023.

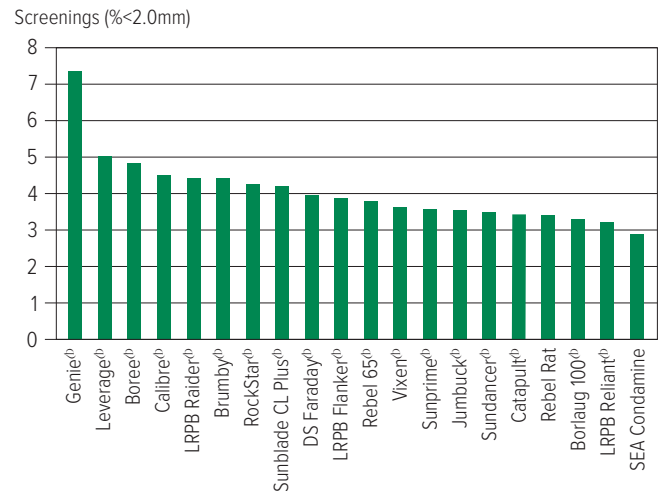


Figure 15: Screenings (<2.0mm) comparisons for early season wheat varieties from seven NVT sites in Southern Queensland in 2022.

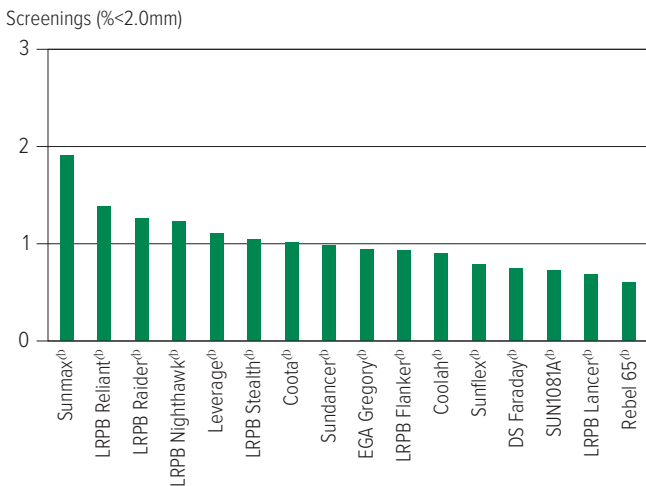


Figure 16: Screenings (<2.0mm) comparisons for early season wheat varieties from eight NVT sites in Southern Queensland in 2023.

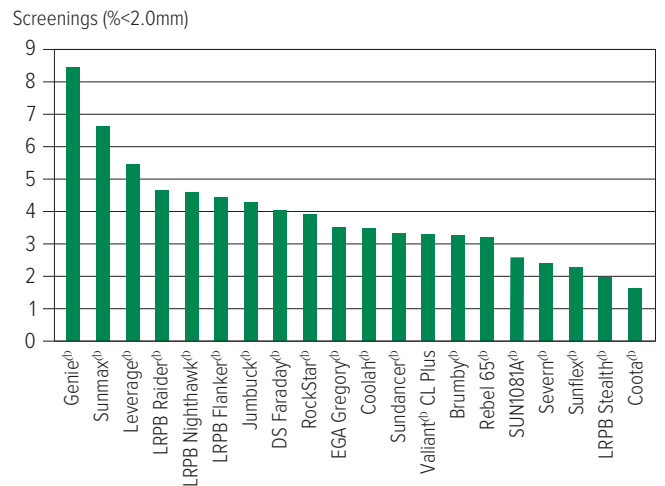


Figure 17: Screenings (<2.0mm) comparisons for durum wheat varieties from two NVT sites in Southern Queensland in 2022.

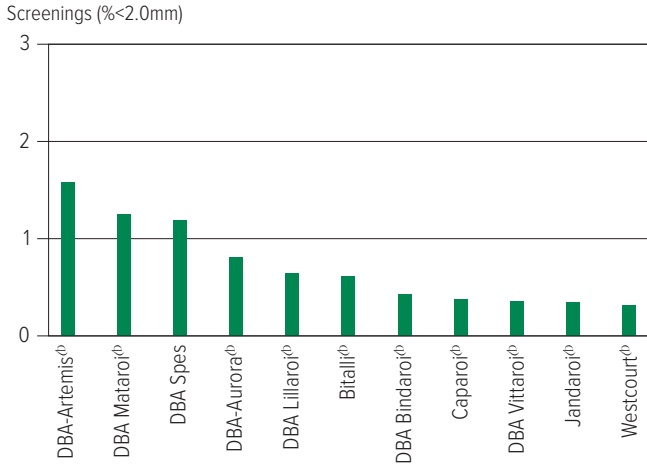
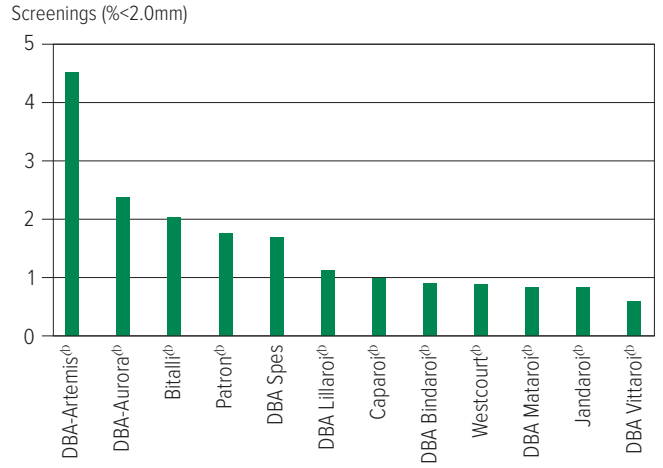


Figure 18: Screenings (<2.0mm) comparisons for durum wheat varieties from two NVT sites in Southern Queensland in 2023.



WHEAT

BARLEY

CHICKPEA

FABA BEAN

Wheat variety disease ratings – Queensland

The following tables contain varietal ratings for the predominant diseases of wheat in Queensland. These ratings are updated annually by crop pathologists and were released in March 2024.

Selected varieties of most relevance to Queensland growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 23: Wheat disease guide for Queensland.

Variety	Leaf rust	Stem rust	Stripe rust (east coast resistance)	Black point	Crown rot	Powdery mildew	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN tolerance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus thornei</i>)	RLN tolerance (<i>Pratylenchus thornei</i>)	Yellow leaf spot
Boree ^{db}	S	MR	SVS	S	S	VS	S	I	MSS	MII	MRMS
Borlaug 100 ^{db}	MR	MR	SVS	MSS	MSS		S	T	MS	TMT	MRMS
Brumby ^{db}	SVS	MR	MS	MSS	S	MR/S	MRMS	TMT	MS (P)	MI	MRMS
Calibre ^{db}	S	MR	S	MSS	S	MSS	S	MT	MSS	MII	MRMS
Catapult ^{db}	S	MR	S	S	MSS	S	S	MII	MS	MT	MRMS
Condo ^{db}	S	MR	MRMS/MS	MS	S	MRMS	S	MT	MS	TMT	MS
Coolah ^{db}	RMR	MR	MSS	S	MSS	S	S	MT	MS	MT	MSS
Coota ^{db}	MR	RMR	S	MS	MSS	S	MR	MI	MS	MTMI	MSS
Cutlass ^{db}	RMR	R	MSS	MS	S	MSS	MSS	MT	MSS	MI	MSS
Denison ^{db}	S	MS	S	MS	MSS	S	S	MII	S	MI	MRMS
DS Faraday ^{db}	RMR	RMR	MRMS	MSS	MSS	R (P)	S	MTMI	MSS	MT	MSS
DS Tull ^{db}	MSS	MR	MS	MRMS	S		MSS	MT	MSS	MTMI	S
EG Jet ^{db}	S	S	MRMS	MS	S	MSS	S	MI	S	I	MRMS
EG Titanium	MS	MS	MR	MSS	MSS	S	MSS	MTMI	MSS	MTMI	MSS
EGA Gregory ^{db}	MR	MR	MS	MSS	S	MR	S	MT	MSS	MT	S
Genie ^{db}	S (P)	MS (P)	MRMS (P)			SVS (P)					MRMS (P)
Hyperno ^{db}	RMR	RMR	MR	MS	SVS	MR	MS	MTMI	RMR	TMT	MRMS
Jillaroo ^{db}	S	MS	MSS	MS	S	S	S	I	MS (P)	MII	MS
Jumbuck ^{db}	RMR (P)	MRMS (P)	MR (P)			MS (P)					MS (P)
Leverage ^{db}	RMR#	MR	MRMS	MSS (P)	S	S	S		MS	MT	MRMS
LRPB Avenger ^{db}	S	MS	S	MRMS	S	SVS	MSS	MI	MRMS	MI	MS
LRPB Flanker ^{db}	RMR	MR	MRMS	MS	MSS	MRMS	S	MT	MSS	MT	MSS
LRPB Hellfire ^{db}	MSS	MR	MR	S	MSS	SVS	MSS	MTMI	MSS	MI	MSS
LRPB Impala ^{db}	SVS	MR	MRMS	MS	MSS	R	SVS	MTMI	S	MII	MSS
LRPB Lancer ^{db}	RMR	R	RMR	MRMS	MSS	R	S	MTMI	MS	TMT	MS
LRPB Mustang ^{db}	MSS	MRMS	MR	MS	MSS	MSS	S	MI	MSS	MTMI	MSS
LRPB Nighthawk ^{db}	MSS	RMR	MR	MS	MSS	SVS	MSS	IVI	MS	MI	MS
LRPB Oryx ^{db}	RMR#	MR	MS	MS	MSS	MR	MSS	MII	MSS	IVI	MSS
LRPB Raider ^{db}	RMR	RMR	MR	MSS	S	MSS	MSS	MTMI	MS	TMT	MSS
LRPB Reliant ^{db}	RMR	R	MR	MS	MS	RMR	SVS	MTMI	MSS	TMT	S
LRPB Spitfire ^{db}	S	MR	MRMS	MSS	MS	MRMS	MSS	MI	MS	MTMI	S
LRPB Stealth ^{db}	RMR#	R	RMR	MRMS	MSS	MRMS	MSS	MTMI	S	MTMI	MS
LRPB Tracer ^{db}	MR# (P)	MS (P)	MR (P)			MSS (P)					S (P)
Rebel 65 ^{db}	MRMS	MSS	MS	MSS	S		S	TMT	MRMS	TMT	MSS
Rebel Rat	MRMS#	MRMS	MS	MSS	MSS	VS	S	T	MSS	MT	MRMS
RGT Zanzibar	SVS	VS	MR	MRMS	S	RMR	S	IVI	MS (P)	MI	MS
RockStar ^{db}	S	MRMS	S	MSS	S	SVS	MRMS	I	MS	MI	MRMS
Scepter ^{db}	MSS	MRMS	MSS	MS	MSS	SVS	S	MTMI	MSS	MT	MRMS
SEA Condamine	RMR	MRMS	MSS	MRMS	MSS		S	MT	MS	MT	MSS
SEA Peel	RMR	MR#	MR	MSS (P)	MSS	MSS	MSS		MRMS	MI	MS
SEA Stockman	MR	MS	MRMS	MSS (P)	S	SVS	MSS		S	MTMI	MSS
Severn ^{db}	MRMS	MS	RMR	MR	S	R	S		MRMS		MRMS
SUN1081A ^{db}	MR#	MRMS	MR		MS	S	S		MRMS	TMT	MRMS
Sunblade CL Plus ^{db}	MSS	MS	MRMS	MRMS	S	S	MSS	MI	MRMS	MT	MSS
Suncentral ^{db}	RMR	MRMS		MRMS	MSS	SVS	MRMS	MI	MRMS	MT	MSS
Sunchaser ^{db}	R	MR		MRMS	MSS	VS	MSS	MTMI	MSS	MT	MS

WHEAT
BARLEY
CHICKPEA
FABA BEAN

Continued on next page

Table 23: Wheat disease guide for Queensland (continued).

Variety	Leaf rust	Stem rust	Stripe rust (east coast resistance)	Black point	Crown rot	Powdery mildew	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN tolerance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus thornei</i>)	RLN tolerance (<i>Pratylenchus thornei</i>)	Yellow leaf spot
Sundancer ^{db}	RMR	MR	MR	MSS (P)	MSS	S	MSS		MS	MT	MS
Sunflex ^{db}	RMR#	MR	MRMS	MSS	MSS	S	S	MI	MSS	MI	MS
Sunmaster ^{db}	RMR	MS	MRMS	MR	MSS	MSS	MRMS	MTMI	MS	TMT	MSS
Sunmax ^{db}	MS	MRMS	RMR	MRMS	MSS	S	S	MT	MS	MI	MSS
Sunprime ^{db}	MR#	MS	MS	MSS	MSS		S	MTMI	S	MTMI	MSS
Suntop ^{db}	MR	MRMS	MRMS	MSS	MSS	S	S	MT	MRMS	TMT	MSS
Valiant ^{db} CL Plus	S	MR	S	MS (P)	MSS	VS	S	MII	S (P)	IVI	MRMS
Vixen ^{db}	SVS	MRMS	SVS	MSS	S	SVS	MRMS	I	MS	I	MRMS
Willaura ^{db}	MRMS	MR	S	MRMS	S	SVS	MSS	MII	MRMS	MTMI	MS
DURUM											
Caparoi ^{db}	RMR	MR	MS	MSS	VS	S	MS	MI	MR	MT	MR
DBA Bindaroi ^{db}	MR	MR	MS	MRMS	SVS	MSS	MRMS	MI	MR	MTMI	MS
DBA Lillaroi ^{db}	RMR	RMR	MS	MS	SVS	MSS	MRMS	MI	RMR	MT	MRMS
DBA Mataroi ^{db}	MR	MRMS	MS	MS	SVS	S	MS	MT	RMR	MI	MRMS
DBA Spes	RMR	R	MS	MS	VS	MSS	MRMS	MTMI	RMR	MI	MRMS
DBA Vittaroi ^{db}	RMR	MR	MS	MSS	SVS	MS	MS	I	MR	MI	MRMS
DBA-Artemis ^{db}	RMR	MR	MRMS	MS	SVS	S	MS	MII	MR	MTMI	MRMS
DBA-Aurora ^{db}	RMR	RMR	MRMS	MS	SVS	MSS	MRMS	MI	RMR	MT	MRMS
Jandaroi ^{db}	MR	MRMS	MRMS	MS	VS	MSS	MS	MII	MRMS	MTMI	MRMS
Patron ^{db}	MR#	RMR	MRMS	MSS	SVS	MSS	MRMS	T	MR	MT	MRMS
Westcourt ^{db}	RMR	RMR	MR	MSS	VS	S	MS	MI	MR	MT	MRMS

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.

WHEAT
BARLEY
CHICKPEA
FABA BEAN

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. Please go to nvt.grdc.com.au to find trial results for any new varieties released since the publication of this harvest report.

Variety	Breeding company	Grain classification	End point royalty* (\$)	Comments supplied by breeding company ¹
Neo [®] CL	InterGrain	Under malt evaluation	4.25	Neo [®] CL is a mid-maturing, imidazolinone-tolerant spring barley, ideally suited to medium-high rainfall environments. Neo [®] CL provides an outstanding disease resistance profile with excellent resistance to cereal cyst nematode, powdery mildew and the spot form of net blotch, and useful resistance to the net form of net blotch and leaf scald. Neo [®] CL has a semi-prostrate early growth habit, medium plant height, good tolerance to lodging, good grain retention and tolerance to head loss, and very good levels of grain plumpness. Neo [®] CL has been accepted into Grains Australia's malting accreditation program with earliest potential final accreditation in March 2025.
Spinnaker [®]	Secobra Recherches		TBC	Released under code name SCA21-Y003.

* EPR amount is ex-GST, [®] denotes Plant Breeder's Rights apply. ¹ All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

WHEAT

BARLEY

CHICKPEA

FABA BEAN

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

Barley variety yield performance – Southern Queensland

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: Brookstead main season barley.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.44	4.58			4.12
Yeti ^{db}	124	118	Trial failed	Compromised trial	101
Maximus ^{db} CL*	115	114			104
Laperouse ^{db}	113	113			105
Combat ^{db}					100
Fathom ^{db}	132	103			94
Minotaur ^{db}					102
Titan AX ^{db*}					99
Beast ^{db}	120	106			92
Neo ^{db} CL*					105
Spinnaker ^{db}					107
Spartacus CL ^{db*}	116	104			93
Leabrook ^{db}	107	104			97
Compass ^{db}	117	104			91
Commodus ^{db} CL*		101			93
Cyclops ^{db}		100			93
Sowing date	14 Jun	11 Jun			1 Jun
Rainfall J–M (mm)	109	289	304	429	140
Rainfall A–O (mm)	50	237	252	506	143

Special thanks to 2023 trial cooperator.
* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 2: Condamine main season barley.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		3.33	3.27	5.55	2.60
Spinnaker ^{db}				122	101
Neo ^{db} CL*					102
RGT Planet ^{db}		100	104	114	100
Zena ^{db} CL*			102	115	98
Yeti ^{db}		109	110	95	111
Combat ^{db}			108	99	106
Rosalind ^{db}		102	101	105	104
Laperouse ^{db}		100	108	100	105
Leabrook ^{db}		112	101	93	107
Maximus ^{db} CL*		93	107	102	103
Bottler ^{db}		98	99	105	99
Titan AX ^{db*}				87	108
Alestar ^{db}		97	95	105	97
Beast ^{db}		114	98	86	109
Minotaur ^{db}			105	105	94
Sowing date	11 Jun	26 May	10 May	31 May	26 May
Rainfall J–M (mm)	105	224	302	251	161
Rainfall A–O (mm)	32	146	284	510	82

Special thanks to 2023 trial cooperator, Culara Farming.
* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 3: Macalister main season barley.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	1.50	3.82			3.05
Laperouse ^{db}	102	104	Trial failed	Compromised trial	106
Maximus ^{db} CL*	100	108			101
Titan AX ^{db*}					107
Yeti ^{db}	108	106			98
Commander ^{db}	100	99			106
Commodus ^{db} CL*		104			95
Compass ^{db}	109	107			90
Leabrook ^{db}	105	104			94
Fathom ^{db}	114	94			102
Combat ^{db}					101
Alestar ^{db}	90	106			98
Neo ^{db} CL*					104
Beast ^{db}	110	106			87
Bottler ^{db}	94	103			97
Rosalind ^{db}	96	110			87
Sowing date	15 Jun	28 May			27 May
Rainfall J–M (mm)	129	282	277	268	112
Rainfall A–O (mm)	56	144	282	401	74

Special thanks to 2023 trial cooperator.
* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

Table 4: Mungindi main season barley.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	2.27	3.62	4.43	2.54	3.14
Yeti ^{db}	116	110	107	103	111
Combat ^{db}			106	95	112
Spinnaker ^{db}				121	99
Minotaur ^{db}			109	87	110
Neo ^{db} CL*					106
Laperouse ^{db}	104	100	106	106	107
Maximus ^{db} CL*	105	95	108	110	103
Titan AX ^{db*}				91	111
Beast ^{db}	115	109	99	91	102
RGT Planet ^{db}	101	101	103	112	96
Leabrook ^{db}	108	105	99	99	102
Cyclops ^{db}		104	104	95	94
Fathom ^{db}	109	111	99	76	109
Rosalind ^{db}	106	96	102	112	93
Zena ^{db} CL*			102	116	92
Sowing date	14 May	14 May	13 May	17 Jun	19 May
Rainfall J–M (mm)	80	365	377	206	155
Rainfall A–O (mm)	42	221	286	510	49

Special thanks to 2023 trial cooperator.
* herbicide-tolerant variety. Learn more via the [NVT Long Term Yield Reporter](#)

WHEAT
BARLEY
CHICKPEA
FABA BEAN

Barley variety quality – Southern Queensland

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 2022 and 2023 NVT averaged for trials in the Southern Queensland 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 two NVT sites in Southern Queensland in 2022.

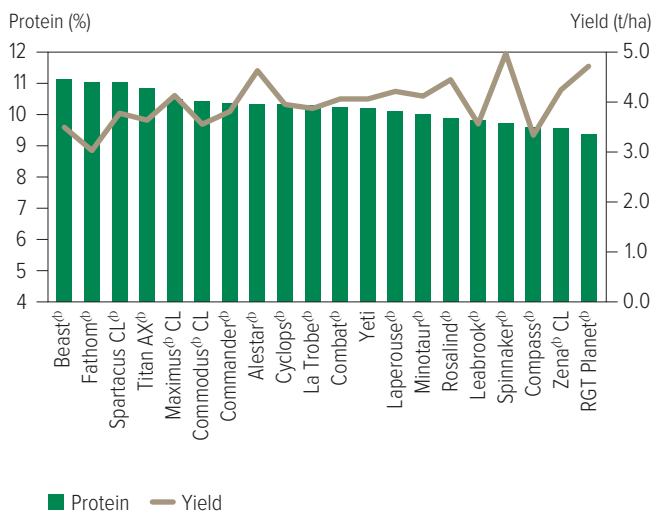
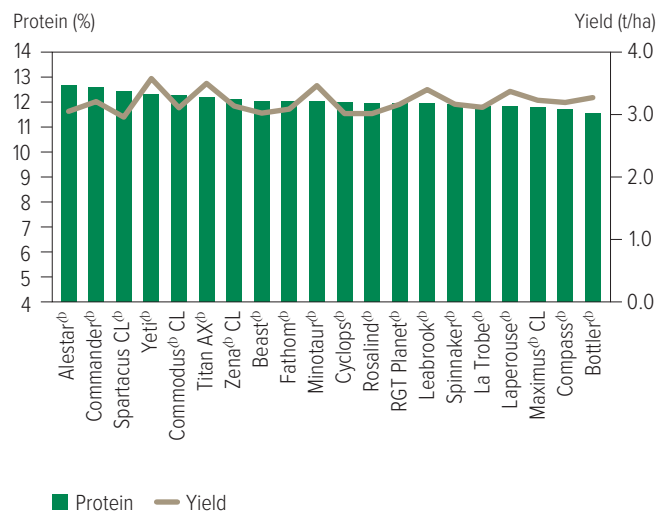


Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from four NVT sites in Southern Queensland in 2023.



WHEAT
BARLEY
CHICKPEA
FABA BEAN

Test weight comparisons

Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from two NVT sites in Southern Queensland in 2022.

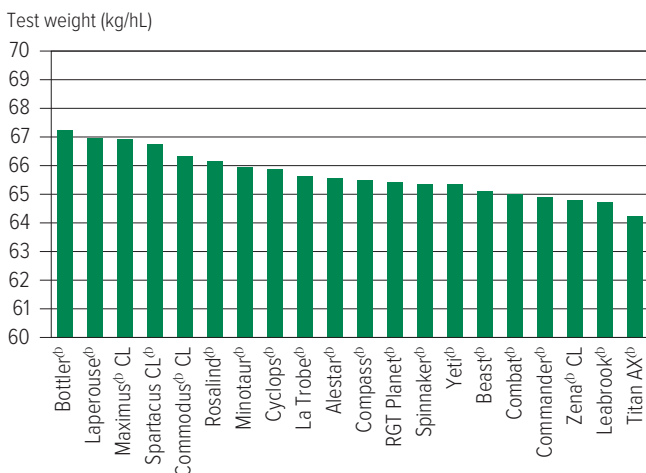
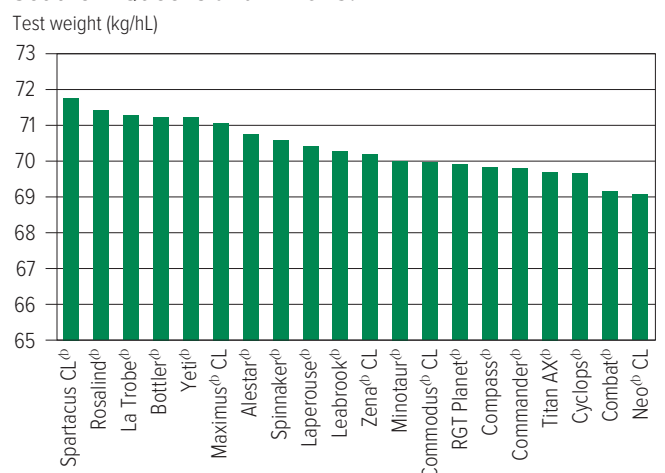


Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from four NVT sites in Southern Queensland in 2023.



Screenings comparisons

Figure 5: Screenings (<2.2mm) comparisons for main season barley varieties from two NVT sites in Southern Queensland in 2022.

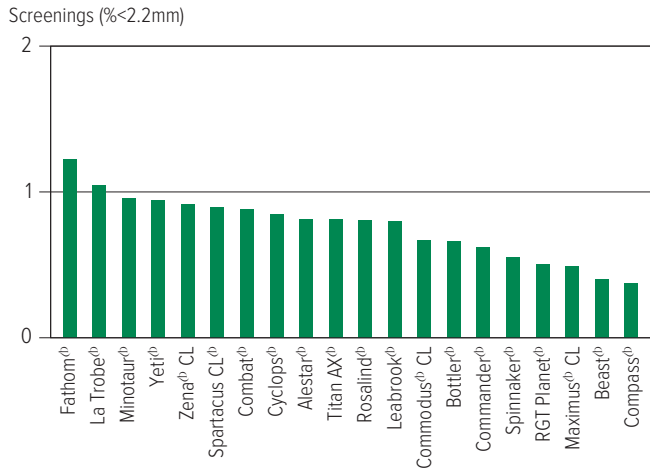
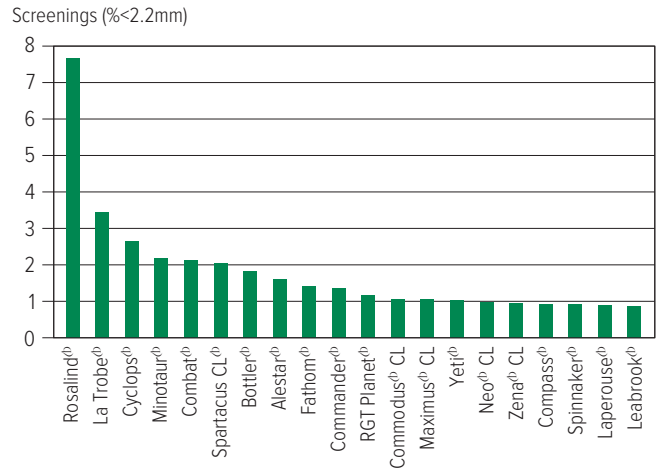


Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from four NVT sites in Southern Queensland in 2023.



Retention comparisons

Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from two NVT sites in Southern Queensland in 2022.

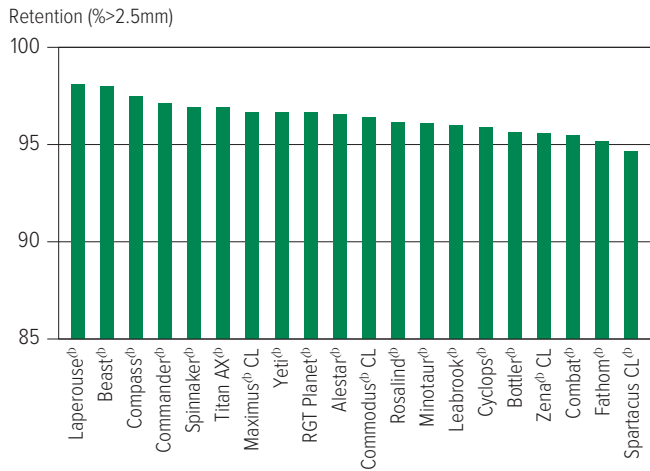
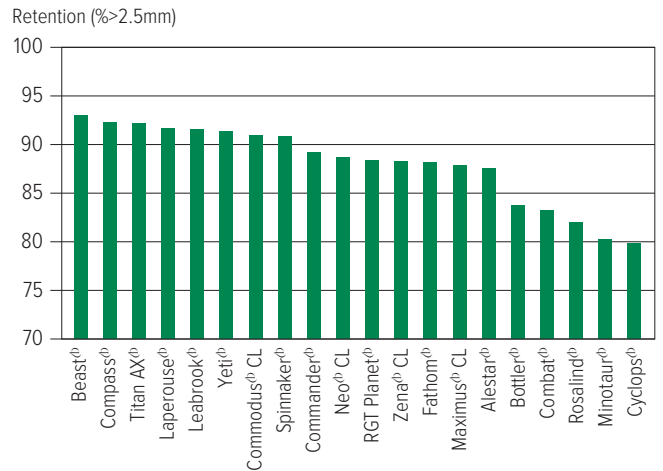


Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from four NVT sites in Southern Queensland in 2023.



WHEAT

BARLEY

CHICKPEA

FABA BEAN

Barley variety disease ratings – Queensland

The following tables contain varietal ratings for the predominant diseases of barley in Queensland. These ratings are updated annually by crop pathologists and were released in March 2024.

Selected varieties of most relevance to Queensland growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 5: Barley disease guide for Queensland.

Variety	Leaf rust	Black point	Crown rot	Net form net blotch	Spot form net blotch	Powdery mildew	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN tolerance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus thornei</i>)	RLN tolerance (<i>Pratylenchus thornei</i>)	Ramularia
Alestar ^{db}	MS	MRMS	S	MSS	S	MR	MR	I	MR	MTMI	SVS
Banks ^{db}	S	MS	MSS	MRMS	MSS	MS	MS	MII	MR	TMT	VS
Bass ^{db}	SVS	MRMS	MSS	MSS	MSS	S	MS	I	MRMS	MTMI	VS
Beast ^{db}	S	MSS	S	MRMS	MS	S	MRMS	MI	MRMS	TMT	SVS
Bottler ^{db}	MS	MRMS	SVS	MS	MSS	RMR	MS	MT	RMR	MI	SVS
Buff ^{db}	S-SVS	MS	S	MS	MSS	S	MRMS	MT	MS	MI	SVS
Combat ^{db}	MS	MSS	S	MRMS	RMR	MS	MRMS		MS	TMT	SVS
Commander ^{db}	S-SVS	MSS	S	MS-S	MSS	MSS	MRMS	MTMI	MRMS	MT	SVS
Commodus ^{db} CL	S	MS	S	MRMS	MRMS	MSS	MRMS	TMT	MRMS	MTMI	SVS
Compass ^{db}	SVS	MSS	MSS	MS	MS	S	MRMS	TMT	MR	TMT	SVS
Cyclops ^{db}	S	MSS	MSS	MRMS	MS	SVS	MRMS	MI	MRMS	MI	SVS
Fairview ^{db}	S	MS	MSS	SVS	S	R	MR		MR	MI	SVS
Fandaga ^{db}	MSS	MRMS	MSS	MS	MSS	R	MR		MR	TMT	VS
Fathom ^{db}	MS	MSS	SVS	MS	MRMS	MRMS	MRMS	T	MR	MT	SVS
Flinders ^{db}	MSS	MRMS	MSS	MRMS	MSS	RMR	MRMS		MR	MTMI	SVS
Keel	S	MSS	S	S	MR	S	MS		MRMS	MII	SVS
Kiwi	MS	MS	MSS	MRMS	MSS	RMR	MRMS	MI	RMR	MTMI	VS
La Trobe ^{db}	MS-S	MSS	S	MS	S	MSS	MRMS	MT	MRMS	MT	SVS
Laperouse ^{db}	SVS	MSS	S	MRMS	MR	MSS	MRMS	MI	MR	MTMI	VS
Leabrook ^{db}	SVS	MS	S	MS	MRMS	S	MRMS	MT	RMR	TMT	VS
Litmus ^{db}	S	MS	S	MS	S	MS	MS	MTMI	MRMS	IVI	VS
Maximus ^{db} CL	S	MSS	S	MRMS	MRMS	S	MRMS	MT	MRMS	MI	VS
Minotaur ^{db}	SVS	MRMS	MSS	MRMS	S	S	MRMS	MI	MRMS	TMT	SVS
Neo ^{db} CL	S (P)	MRMS (P)		MRMS-S (P)	RMR (P)	RMR (P)	RMR (P)		MR (P)		SVS (P)
RGT Planet ^{db}	MRMS	MRMS	MSS	MRMS-S	S	RMR	MRMS	MT	MR	MI	SVS
Rosalind ^{db}	MRMS	MS	S	MRMS	MS	MSS	MRMS	MT	MRMS	TMT	VS
SakuraStar	MSS	MS	S	MS	MR	MSS	MR	MT	MR	MTMI	SVS
Scope CL ^{db}	S	MS	S	MS	MS	MRMS	MRMS	MI	MRMS	MI	SVS
Spartacus CL ^{db}	MSS	MSS	S	MS	S	MSS	MRMS	MII	MRMS	MI	VS
Spinnaker ^{db}	MSS	MRMS	S	S	MS	RMR	MR		MS	MTMI	VS
Titan AX ^{db}	S	MSS	S	MRMS	MRMS	MSS	MR		MR	TMT	VS
Topstart	MRMS	MRMS	MSS	MS	S	RMR	RMR	I	RMR	MI	SVS
Urambie	S	MRMS	MSS	MRMS	S	MS	MRMS	IVI	MR	I	VS
Westminster ^{db}	MRMS	MRMS	MSS	MRMS	S	RMR	MRMS	IVI	MS	I	SVS
Yeti ^{db}	S	MSS	S	MS	MRMS	S	MR	TMT	MR	MT	VS
Zena ^{db} CL	MSS	MRMS (P)	S	MS	S	RMR	MRMS		MR	MT	VS

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.

WHEAT

BARLEY

CHICKPEA

FABA BEAN

CHICKPEA

Chickpea variety yield performance – Southern Queensland

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.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)				3.89	1.49
CBA Captain [Ⓛ]	No trial	Trial failed	Compromised trial	105	97
PBA Boundary [Ⓛ]				103	96
PBA Drummond [Ⓛ]				95	108
PBA HatTrick [Ⓛ]				98	93
PBA Seamer [Ⓛ]				94	95
Kyabra [Ⓛ]				86	
Sowing date		2 Jun	16 Jun	24 Jun	6 Jun
Rainfall J–M (mm)		193	256	418	145
Rainfall A–O (mm)		153	280	443	136

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](https://nvt.grdc.com.au/resources/crop-sowing-guides)

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)		1.39			2.44
PBA Drummond [Ⓛ]	Trial results below standard	105	Trial failed	Trial failed	113
Kyabra [Ⓛ]		105			101
CBA Captain [Ⓛ]		97			96
PBA Boundary [Ⓛ]		99			94
PBA Seamer [Ⓛ]		97			92
PBA HatTrick [Ⓛ]		98			90
Sowing date	22 May	4 Jun	31 May	15 Jun	2 Jun
Rainfall J–M (mm)	109	289	304	429	140
Rainfall A–O (mm)	50	237	252	506	143

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](https://nvt.grdc.com.au/resources/crop-sowing-guides)

WHEAT

BARLEY

CHICKPEA

FABA BEAN

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

Table 3: Condamine desi chickpea.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.78	1.28	1.17	2.76	
PBA Drummond ^{db}	94	109	131	105	Trial results below standard
Jimbour	92				
Kyabra ^{db}	74	104	110	98	
CBA Captain ^{db}	107	96	88	99	
PBA Seamer ^{db}	96	85	113	94	
PBA Boundary ^{db}	93	101	70	98	
PBA HatTrick ^{db}	87	93	80	95	
Sowing date	11 Jun	4 Jun	8 Jun	23 Jun	
Rainfall J–M (mm)	105	224	302	228	161
Rainfall A–O (mm)	32	146	284	633	82

Special thanks to 2023 trial cooperator, Culara Farming.
Learn more via the [NVT Long Term Yield Reporter](#)

Table 4: Mungindi desi chickpea.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)	0.35		2.59	2.13	1.21
PBA Drummond ^{db}	100	Compromised trial	107	94	112
CBA Captain ^{db}	105		99	103	93
PBA Boundary ^{db}	101		90	109	99
Kyabra ^{db}	75		93	96	113
PBA HatTrick ^{db}	82		91	105	94
PBA Seamer ^{db}	72		101	93	90
Jimbour	93				
Sowing date	21 May		3 Jun	12 Jun	11 Jul
Rainfall J–M (mm)	80	365	377	206	155
Rainfall A–O (mm)	42	221	286	510	49

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](#)

Chickpea variety disease ratings – Queensland

The following table contains varietal ratings for the predominant diseases of chickpea in Queensland. These ratings are updated annually by crop pathologists and were released in March 2024.

Selected varieties of most relevance to Queensland growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 5: Chickpea disease guide for Queensland.

Variety	Ascochyta blight (pathogen group 2 – north)	2022-23 Phytophthora root rot	RLN resistance (<i>Pratylenchus neglectus</i>)	RLN tolerance (<i>Pratylenchus neglectus</i>)	RLN resistance (<i>Pratylenchus thornei</i>)	RLN tolerance (<i>Pratylenchus thornei</i>)
DESI						
CBA Captain ^{db}	MS	S	MR	MT	MS	MT
Genesis™ 836	S		MR	MII	MS	MT
Kyabra ^{db}	VS	VS	MRMS	MT	S	MT
Neelam ^{db}	S		MRMS	MI	MS	MTMI
PBA Boundary ^{db}	S	VS	RMR	MI	MRMS	MT
PBA Drummond ^{db}	VS	VS	MR	TMT	MRMS	MT
PBA HatTrick ^{db}	S	S	MRMS	MT	MRMS	MTMI
PBA Maiden ^{db}	S		MRMS	MI	MRMS	MII
PBA Pistol ^{db}	VS		RMR	T	MRMS	MII
PBA Seamer ^{db}	MS	S	MRMS	MI	MRMS	MTMI
PBA Slasher ^{db}	S		MRMS	MI	MRMS	MT
PBA Striker ^{db}	S		MRMS	MI	MRMS	TMT
KABULI						
Almaz ^{db}	MS		MRMS	MII	S	IVI
Genesis™ 090	MS		MRMS	IVI	MS	MII
Genesis™ Kalkee	S		MRMS	VI	MS	MI
PBA Magnus ^{db}	MS		MR	MII	MSS	I
PBA Monarch ^{db}	MS		MRMS	I	MS	MII
PBA Royal ^{db}	MS		MR	VI	MS	MII

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 – Southern Queensland

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.

Year	2019	2020	2021	2022	2023
Mean yield (t/ha)			2.24		
PBA Nasma [Ⓛ]	No trial	Compromised trial	100	Trial failed	Compromised trial
FBA Ayla [Ⓛ]			99		
PBA Warda [Ⓛ]			99		
Cairo			91		
PBA Nanu [Ⓛ]			91		
Doza			85		
Sowing date		17 Apr	27 Apr	27 Apr	25 Apr
Rainfall J–M (mm)		193	256	418	145
Rainfall A–O (mm)		153	280	443	136

Special thanks to 2023 trial cooperator.
Learn more via the [NVT Long Term Yield Reporter](https://nvt.grdc.com.au/resources/long-term-yield-reporter)

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

Faba bean variety disease ratings – Queensland

The following table contains varietal ratings for the predominant diseases of faba bean in Queensland. These ratings are updated annually by crop pathologists and were released in March 2024.

Selected varieties of most relevance to Queensland growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

Table 2: Faba bean disease guide for Queensland.

Variety	Ascochyta blight	Cercospora leaf spot	Chocolate spot (Botrytis)	RLN resistance (<i>Pratylenchus thornei</i>)*	Leaf rust
Cairo	VS	S	S	MSS	S
Doza	VS	S	S	MSS	MR
Farah ^{db}	MS	S	S	MS	VS
FBA Ayla ^{db}		S	S	MRMS	MR
Fiesta VF	S	S	S	MS	VS
Nura ^{db}	MR (P)	S	MS	MS	VS
PBA Amberley ^{db}	MR	S	MRMS	MRMS	VS
PBA Bendoc ^{db}	MR	S	S	MRMS	VS
PBA Marne ^{db}	MS	S	MS (P)	MS	MRMS
PBA Nanu ^{db}		S	S	MRMS	MR
PBA Nasma ^{db}	S	S	S	MSS	MRMS
PBA Rana ^{db}	MRMS (P)	S	MS	MS	VS
PBA Samira ^{db}	MR (P)	S	MS	MRMS	S
PBA Warda ^{db}	S	S	S	MRMS	MRMS
PBA Zahra ^{db}	MRMS	S	MS	MRMS	S

Learn more via the [NVT Disease Ratings](#).

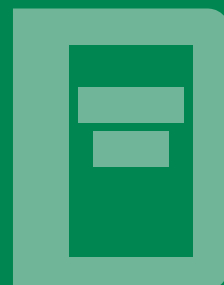
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating.

WHEAT
BARLEY
CHICKPEA
FABA BEAN

NVT tools



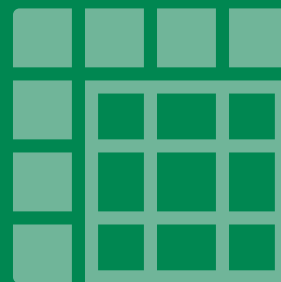
Harvest Reports & Crop Sowing Guides



Trial results



Long Term Yield Reporter



NVT Disease Ratings

Subscribe

NVT Trial Notification Service



Get an email the moment results for your local NVT trials are available.

NVT publications



Get an email as soon as your selected NVT Harvest Report is published.