

Crop variety update – newer varieties and potential releases for 2023

These notes should be read in conjunction with the *Winter crop variety sowing guide* for more information on current varieties and best management crop practices.



Cereal varieties – newer varieties and potential releases for 2023

The following is a list of newer wheat, barley and oat varieties and possible new releases for 2023, pending classification and seed supply. The information has been collated from breeding company information and will be updated for the *2023 Winter crop variety sowing guide*.

For 2023 potential releases, further and more detailed information is available from the respective breeding companies.

These notes should be read in conjunction with the *Winter crop variety sowing guide 2022* for more detailed information on variety descriptions, disease ratings for released varieties and best management crop practices.

Growers should be aware that some key diseases now have regionally based pathotypes, so variety reactions to a disease can vary depending on region.

Note: All classifications/ratings are preliminary and subject to final review.

Grain yield data and disease ratings shown in the following tables are from GRDC's National Variety Trial (NVT) Program.

Disease ratings

The disease ratings are from the NVT national disease screening program and also from the nominated crop breeding companies. Whilst they are current at the time of publication, you should regularly check for updates from the [NVT website](https://nvt.grdc.com.au/nvt-disease-ratings) (<https://nvt.grdc.com.au/nvt-disease-ratings>).

Resistance definitions:

- R (Resistant) indicates a high level of resistance and grain yield is unlikely to be reduced.
- R-MR (Resistant to Moderately resistant) indicates a high level of resistance and grain yield is unlikely to be reduced.
- MR (Moderately resistant) indicates disease can develop in favourable conditions, some yield loss could occur. Early disease control can be important in some varieties.
- MR-MS (Moderately resistant to Moderately susceptible) indicates disease can develop in favourable conditions, some yield loss could occur. Early disease control can be important in some varieties.
- MS (Moderately susceptible) indicates disease might be conspicuous in favourable situations with moderate yield losses. Early disease control is important.
- MS-S (Moderately susceptible to Susceptible) indicates disease might be conspicuous in favourable situations with moderate yield losses. Early disease control is important.
- S (Susceptible) indicates high levels of disease can occur with substantial yield losses. Early disease control is essential.
- S-VS (Susceptible to Very susceptible) indicates high levels of disease can occur with substantial yield losses. Early disease control is essential.
- VS (Very susceptible) indicates high levels of disease can occur with substantial yield losses.

Variety		Maximum grain classification		Grain yield % of EGA Wedgetail		Disease resistance ratings							
		Northern	South-eastern	North west	North east	South west	South east	Crown rot	Leaf rust	Powdery mildew	Stripe rust	Yellow leaf spot	Septoria tritici blotch
Long season wheat													
Anapurna	Awned, red-grained winter feed wheat. Suitable for very early sowing and graze and grain production. Anapurna is a high yielding wheat suited to the high rainfall zones of NSW and is similar in maturity to RGT Accroc. Excellent standability. AGT.	FEED	117	—	124	—	S-VS	MS	R-MR	R-MR	MR-MS	MR-MS	
BigRed	An awned, red-grained winter wheat. Mid slow maturing variety for medium to high rainfall zones and irrigation. AGF seeds.	FEED	118	—	123	—	—	MR-MS ①	R	R ①	MR ①	MR-MS ①	
RGT Cesario	Awnless red-grained winter wheat. Multipurpose feed grain quality wheat suited to grazing, silage and grain production. Suited to the high rainfall zone of NSW. Suitable for sowing late February to early April for early grazing. Excellent standability. Similar maturity to RGT Accroc. Bred by RAGT, available via Seed Force Broadacre Commercial Partners.	FEED	119	—	123	—	VS	R-MR ①	R-MR	R-MR	MR	MR	
NEW RGT Waugh (SFR65-085)	Slow, white-grained winter wheat suited to the medium to high rainfall zone. Suitable for sowing late February to early April for early grazing. Very high yield potential. Excellent standability. Bred by RAGT, available via Seed Force Broadacre Commercial Partners.	FEED	117	—	119	—	S	S	R	R-MR	MR-MS	MR-MS	
Severn	Awnless winter wheat. A forage winter wheat ideal for grazing, silage and hay production. It is best suited to early sowing in eastern and southern areas and exhibits prolific tillering. It has white grain with tolerance to pre-harvest sprouting and is acceptable to feed markets. Severn is tall with good standability. S & W Seed Company.	FEED	104	—	106	—	S	MS	R	R-MR ①	MR-MS	MS ①	

NYC Not yet classified.

① Provisional

② Warning: May be more susceptible to alternative pathotypes.

& Where ratings are separated by '&', the first is correct for the majority of situations, but

different pathotypes are known to exist and the latter rating reflects the response to these pathotypes.

Variety	Early season wheat	Maximum grain classification		Grain yield % of EGA Gregory		Disease resistance ratings							
		Northern South-eastern	South-west	North east	North west	South east	South west	Crown rot	Leaf rust	Powdery mildew	Stripe rust	Yellow leaf spot	Septoria tritici blotch
Coota	Coota is a mid-slow maturing variety suited to the end of April – beginning of May sowing window. It exhibits very low screenings, high test weights and good blackpoint resistance. Short plant height, it has shown good resistance to lodging. AGT.	APH	APH	112	114	113	117	MS-S	MS	S	MS	MS-S	S
LongReach Raider	A shorter, higher-tillering capacity Longreach Reliant plant type, which is showing high and stable yield performance across both early and main season planting dates. Slow spring maturity, best suited to mid April to early May sowing times across NSW. Bred by LongReach Plant Breeders and released by Pacific Seeds.	APH	APH	109	112	112	110	S	R-②	MS-S	R-MR	MS-S	MS-S
NEW LongReach Scotch (LPB16-0046)	Mid-slow spring maturing soft wheat (ASFT) well suited for high yielding soft wheat production systems. Outyielding QAL2000 in southern NSW trials. Medium-short plant height with good straw strength and a well-rounded disease package, suited to irrigated production systems. Seed available for 2023 sowing season. Bred by LongReach Plant Breeders.	NYC	NYC	–	–	–	–	–	–	–	–	–	–
LongReach Stealth	Mid-slow spring maturing variety similar to LRPB Lancer, suited to NSW and QLD. The result of a dedicated cross to improve crown rot resistance in APH germplasm. LRPB Stealth shows improved crown rot resistance and demonstrated yield stability in tough conditions. Medium plant height with similar growth and yield accumulation pattern as LRPB Lancer. Good black point resistance. Pacific Seeds.	APH	APH	106	108	108	110	S	R-MR②	MR-MS	RMR	MS	MS
Sunflex	Sunflex is a slow maturity variety best planted in the mid to late April window in NSW, up to one week earlier than Coolah and LRPB Lancer. Sunflex exhibits a moderately long coleoptile and is adapted to the medium-high rainfall zones of NSW. Sunflex has a moderately short plant height and good lodging resistance consistently producing large grain with low screening losses. AGT.	APH	AH	110	112	121	116	MS-S ①	R-MR & S ①	S	–	MS	MS-S
Valiant CL Plus	A high yielding slow maturity Clearfield® tolerant spring wheat with a similar maturity to Cutlass. Potential AH (pending classification in southern NSW). Check current herbicide registrations for registered product names and adhere to recommended plant growth stages for application timing. Valiant CL Plus best performance has been observed when sown earlier. It has good grain size, test weight and a moderate plant height, and a longer coleoptile. Bred and marketed by InterGrain.	FEED	NYC	–	–	121	117	S	S	VS	MS-S	MR-MS	S

Wheat

Variety	Main season wheat	Maximum grain classification		Grain yield % of EGA Gregory		Disease resistance ratings							
		Northern	South-eastern	North	South	South west	Crown rot	Leaf rust	Powdery mildew	Stripe rust	Yellow leaf spot	Septoria tritici blotch	
Boree	A mid season spring wheat with maturity between Beckom and Scepter. Broadly adapted and suits a range of pH, soil types and environments. High yield potential with APH classification, medium plant height with good straw strength. AGT.	APH	APH	111	111	115	117	S	S	VS	MS-S	MR-MS	S
NEW Brumby (GW6683)	Brumby is a potential APW wheat (pending classification in southern NSW) released by InterGrain in 2022 with seed available for growers in 2023. It is a mid-maturing variety suited to sowing in early May. The variety has shown extremely low powdery mildew infection levels in high pressure disease screening environments in recent seasons (Provisionally rated R).	FEED	NYC	—	—	116	116	—	S-VS ①	R ①	MS ①	MR-MS ①	MS-S ①
Calibre	High yielding, quick-mid maturity spring wheat, slightly quicker than Scepter. Calibre is derived from Scepter and has shown the similar adaption to growing regions of southern NSW. Good sprouting tolerance, similar to Scepter and with a longer coleoptile length than many commonly grown varieties. AGT.	FEED	APH	114	116	116	118	S	S	MS	MR-MS	MR-MS	S
Hammer CL Plus	A high yielding, quick-mid maturing variety tolerant to Clearfield® Intervix® herbicide. Closely related to the widely adapted variety Mace with similar adaptation. Good physical grain package, with low screenings and high test weight. Check current herbicide registrations for registered product rates and adhere to recommended plant growth stages for application timing. AGT.	FEED	AH	—	—	100	106	MS-S	S	MS-S	MS	MR-MS	MS-S
NEW Jillaroo (GW6709)	A high yielding, quick-mid maturing spring wheat with AH classification suited to northern NSW and southern Queensland. It features a moderate plant height with semi-erect growth habit. Jillaroo seed will be commercially available for 2023. Bred and marketed by InterGrain.	AH	FEED	110	112	111	113	—	S ①	S	MS ①	MR-MS ①	MS-S ①
NEW BASF Kingston (BSWDH04-062)	Kingston has a short plant height and good straw strength with a compact head resulting in outstanding lodging resistance and lower stubble residues to manage the following year. Similar maturity/days to heading as Scepter followed by a slower finish, which has shown to result in a minimal yield penalty from an earlier sowing window. Potential AH variety for southern NSW. Seed available for the 2023 season. Bred by BASF and will be marketed by Seednet.	NYC	NYC	—	—	—	—	S	S	S-VS	MS-S	MS-S	S

NYC Not yet classified.

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Wheat		Maximum grain classification	Grain yield % of EGA Gregory	Disease resistance ratings									
Variety				Northern	South-eastern	North east	South west	Crown rot	Leaf rust	Powdery mildew	Stripe rust	Yellow leaf spot	Septoria tritici blotch
NEW LongReach Anvil CL Plus (LRB17-6157)	Quick maturity, two-gene IMI tolerant wheat that can be sprayed at label rates of registered IMI herbicides. Good early vigour providing good weed competition. LRPB Anvil CL Plus has good grain size and is well suited to low-medium rainfall production systems providing a fast-maturing IMI tolerant variety choice to growers. AH classification SA/Vic with southern NSW classification expected Autumn 2023. Bred by GIA, developed by LongReach Plant Breeders and released by Pacific Seeds.	NYC	NYC	—	—	109	114	MS-S	S-VS	VS	MS-S	MS-S	VS
NEW Rebel Rat	Variety information not available at the time of publishing.	FEED	FEED	106	108	—	—	—	MS-S ①	VS	—	MR-MS ①	MS-S ①
NEW BASF Reilly (BHT200205-71)	Reilly is bred from brand new genetics to Australia and has a synthetic parent. Potential AH classification for southern NSW. Medium height plant type bred with a capacity to thrive in low-medium rainfall environments. Similar maturity/days to heading as Scepter followed by a faster finish, which has shown to result in yield stability in tough conditions. Seed available for the 2023 season. Bred by BASF and will be marketed by Seednet.	NYC	NYC	—	—	—	—	—	MS-S	MS-S	MR-MS	S	S
Sunblade CL Plus	First APH quality Clearfield® variety released for NSW, tolerant to Clearfield® Intervix® herbicide. Higher yielding alternative to Elmore CL Plus with improved disease resistance. Derived from Suntop with a similar maturity. Sunblade CL Plus has a slightly shorter plant height compared with Suntop with similar lodging resistance. Displays a similar or slightly smaller grain size to Suntop. Check current herbicide registrations for registered product rates and adhere to recommended plant growth stages for application timing. AGT.	APH	APH	111	112	112	115	S	MS-S	S-VS	MR-MS	MS-S	S
Sunmaster	Sunmaster is a replacement variety for Suntop, with similar maturity and planting window. Sunmaster has a shorter plant type than Suntop, with good lodging tolerance. It has demonstrated consistently higher yield potential than Suntop, with slightly lower screenings and similar test weight. Sunmaster has shown improved yield over Suntop in AGT crown rot trials. AGT.	APH	APH	111	112	113	117	MS-S	R-MR ②	S-VS	MR-MS	MS-S	S

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Durum		Maximum grain classification	Grain yield % of Caparoi		Disease resistance ratings								
Variety			Northern	South-eastern	North west	South east	South west	Crown rot	Leaf rust	Powdery mildew	Stripe rust	Yellow leaf spot	Septoria tritici blotch
Bitalli	A quick-mid maturing variety, 1–2 days slower than DBA_Lillaro. Bitalli exhibits high yield potential and has shown adaptation to tougher environments. Bitalli has very good physical grain characteristic with low screenings and high test weights. Bitalli is resistant to moderately resistant (R-MR) to root lesion nematodes (<i>Pratylenchus thornei</i>) and susceptible to very susceptible (S-VS) to crown rot. Marketed by AGT.	FEED	ADR	—	—	—	102	S-VS	MR	S	MR-MS	MR-MS	MR-MS
DBA_Mataroi	A early-mid maturing durum variety, with a similar heading date to Jandaroi. DBA_Mataroi is adapted to dryland durum production areas of NSW and Queensland. Currently not recommended for high input irrigated cropping systems. Erect plant type, with medium stature and straw strength similar to Caparoi. Grain, semolina and pasta making quality comparable to Caparoi, low screenings, similar to Caparoi with excellent yellow colour and good milling yield. It is resistant-moderately resistant (R-MR) to root lesion nematode (<i>P. thornei</i>), MR-MS to black point and S-VS to crown rot. Bred by the NSW DPI node of Durum Breeding Australia, marketed by Seednet.	ADR	FEED	106	105	—	101	S-VS	MR	S	MR	MR-MS	MS-S
Westcourt	A main season variety similar in maturity to Caparoi. Westcourt exhibits high yield potential in the northern region across diverse environments, with particular adaptation to dryland production systems. Westcourt has very good physical grain quality attributes including large seed size and low percentage of screenings losses, high test weight and excellent semolina colour. Westcourt has maintained an MR rating to stripe rust, is MR to root lesion nematodes (<i>P. thornei</i>) and VS to crown rot. Marketed by AGT.	ADR	ADR	108	110	—	103	VS	R-MR	S	MR	MR-MS	MS

Summary of across sites analysis yield data 2017–2021

Data is sourced from the National Variety Trials, additional grain yield information on varieties is available from the National Variety Trial website (www.acasnvt.com.au).

The tables present NVT 'Production Value' MET data on a yearly regional mean and a combined regional mean basis.

Long season wheat

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Wedgetail (t/ha)	—	—	1.86	4.81	4.41	4.06	
Anapurna ③	—	—	84	123	117	117	5
BigRed ③	—	—	—	—	114	118	2
DS Bennett ③	—	—	100	93	106	99	5
EGA_Wedgetail ③	—	—	100	100	100	100	5
Illabo ③	—	—	105	103	111	107	5
Longsword ③	—	—	110	103	102	103	5
LRPB Kittyhawk ③	—	—	—	109	99	103	4
LRPB Nighthawk	—	—	96	110	107	108	5
Manning ③	—	—	76	119	92	104	5
Naparoo ③	—	—	65	94	95	92	5
RGT Accroc ③	—	—	88	122	115	116	5
RGT Cesario ③	—	—	—	—	115	119	2
RGT Waugh ③	—	—	—	—	107	117	2
Severn ③	—	—	—	—	105	104	2
Sunlamb	—	—	97	—	—	99	1

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Wedgetail (t/ha)	3.90	5.07	2.71	5.52	6.43	5.00	
Anapurna ③	—	—	92	125	133	124	10
BigRed ③	—	—	—	—	130	123	4
DS Bennett ③	114	112	109	107	113	111	14
EGA_Wedgetail ③	100	100	100	100	100	100	14
Illabo ③	109	104	112	113	117	113	14
Longsword ③	104	99	106	106	104	105	14
LRPB Kittyhawk ③	106	104	—	106	104	104	12
LRPB Nighthawk	104	103	98	110	112	108	11
Manning ③	121	119	66	110	107	108	14
Naparoo ③	99	105	90	92	100	97	14
RGT Accroc ③	125	120	90	126	132	125	14
RGT Cesario ③	—	—	—	125	133	123	8
RGT Waugh ③	—	—	—	124	124	119	8
Severn ③	105	104	—	—	108	106	8
Sunlamb	109	106	104	—	—	106	6

③ Winter wheat

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	3.48	2.44	1.36	4.45	5.25	3.71	
Catapult	—	—	—	—	114	114	5
Coolah	110	107	117	108	108	109	18
Coota	—	—	119	110	113	112	13
DS Bennett ③	60	98	59	—	—	93	4
DS Faraday	94	101	91	100	101	99	18
EG Titanium	112	101	121	102	101	104	18
EGA_Gregory	100	100	100	100	100	100	18
EGA_Wedgetail ③	55	86	51	82	97	84	18
Illabo ③	61	89	61	85	101	88	16
Longsword ③	70	—	73	90	102	92	13
LRPB Flanker	105	100	108	100	100	101	18
LRPB Gauntlet	106	92	112	—	—	95	8
LRPB Kittyhawk ③	59	91	—	87	99	87	15
LRPB Lancer	112	97	123	99	98	101	18
LRPB Nighthawk	—	102	68	98	108	98	16
LRPB Raider	—	—	—	109	110	109	10
LRPB Stealth	—	—	117	105	105	106	13
Mitch	113	104	121	—	—	107	8
Rockstar	—	—	—	112	114	114	10
Sunflex	—	109	114	108	—	110	11
Sunlamb	62	97	59	—	—	92	8
Sunmax	88	106	88	103	108	103	18
Feed wheats							
RGT Zanzibar	75	106	76	101	114	102	18
Severn ③	52	95	—	—	103	89	8

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	2.05	1.91	1.54	4.10	5.68	3.15	
Catapult	—	—	125	115	117	118	12
Coolah	117	106	114	107	112	111	22
Coota	—	—	115	107	118	114	12
DS Faraday	95	102	96	100	100	99	22
EG Titanium	115	99	112	99	107	106	22
EGA_Gregory	100	100	100	100	100	100	22
EGA_Wedgetail ③	45	93	32	59	98	74	19
Illabo ③	53	—	—	60	105	79	12
LRPB Flanker	105	99	103	101	101	102	22
LRPB Gauntlet	102	91	98	—	—	95	13
LRPB Kittyhawk ③	53	97	—	68	99	79	16
LRPB Lancer	112	95	106	92	105	102	22
LRPB Nighthawk	—	106	69	83	109	94	16
LRPB Raider	—	—	—	111	111	112	9
LRPB Stealth	—	—	111	104	109	108	12
Mitch	117	102	113	—	—	109	13
Rockstar	—	—	—	110	121	118	9
Sunflex	—	109	108	104	—	112	11
Sunlamb	61	—	—	—	—	86	6
Sunmax	95	107	95	96	110	103	22

③ Winter wheat

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	4.61	2.75	1.41	5.13	5.82	4.16	
Catapult	—	117	140	119	112	117	19
Coolah	105	106	108	118	111	112	21
Coota	—	—	136	117	107	113	17
Cutlass	110	109	113	117	113	114	21
DS Bennett ③	112	106	82	—	—	123	9
DS Faraday	99	100	105	100	98	100	21
DS Pascal	104	104	97	126	116	116	21
EG Titanium	—	103	113	105	100	103	19
EGA_Gregory	100	100	100	100	100	100	21
EGA_Wedgetail ③	99	97	76	114	111	107	21
Illabo ③	102	101	86	128	118	116	21
Longsword ③	104	103	100	125	114	115	21
LRPB Flanker	103	103	102	105	104	104	21
LRPB Gauntlet	97	99	—	—	—	101	4
LRPB Kittyhawk ③	99	98	—	115	110	108	16
LRPB Lancer	95	99	109	116	102	106	21
LRPB Nighthawk	—	100	80	123	117	114	19
LRPB Raider	—	—	—	116	111	112	12
LRPB Stealth	—	—	110	116	105	108	17
LRPB Trojan	107	109	129	119	107	113	21
Rockstar	—	—	137	131	119	124	17
Sheriff CL Plus	—	—	127	119	108	113	17
Sunflex	—	110	104	129	—	121	13
Sunlamb	97	94	63	—	—	110	9
Sunmax	105	—	—	—	—	112	2
Valiant CL Plus	—	—	—	130	120	121	12
Feed wheats							
BigRed ③	—	—	—	—	138	129	6
RGT Zanzibar	115	110	97	141	131	129	21
Severn ③	101	99	—	—	118	115	10

③ Winter wheat

South west ③							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	4.84	6.65	2.96	5.17	5.31	4.76	
Catapult	—	112	134	115	122	120	22
Coolah	104	103	123	108	114	111	25
Coota	—	—	130	113	119	117	20
Cutlass	106	107	111	113	115	112	25
DS Bennett ③	100	98	114	—	—	112	11
DS Faraday	101	102	101	—	—	101	11
DS Pascal	101	100	125	110	118	112	25
EG Titanium	—	102	120	101	106	106	22
EGA_Gregory	100	100	100	100	100	100	25
EGA_Wedgetail ③	95	94	105	102	105	102	25
Illabo ③	98	99	117	111	116	110	25
Longsword ③	101	105	113	114	117	112	25
LRPB Flanker	102	101	105	103	104	103	25
LRPB Gauntlet	101	—	—	—	—	103	3
LRPB Kittyhawk ③	97	94	—	101	107	103	19
LRPB Lancer	102	103	126	105	111	109	25
LRPB Nighthawk	—	97	110	108	112	107	22
LRPB Raider	—	—	—	108	113	110	14
LRPB Stealth	—	—	118	108	112	110	20
LRPB Trojan	109	110	128	113	118	116	25
Rockstar	—	—	142	120	130	125	20
Sheriff CL Plus	—	—	128	112	118	116	20
Sunflex	—	102	129	113	—	116	15
Sunlamb	91	92	101	—	—	102	11
Sunmax	103	—	—	—	—	110	3
Valiant CL Plus	—	—	—	114	123	117	14
Feed wheats							
BigRed ③	—	—	—	—	123	113	7
RGT Zanzibar	103	106	119	124	128	120	25

③ Winter wheat

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	3.50	1.96	1.55	4.65	4.83	3.63	
Beckom	113	106	116	102	109	107	22
Boree	—	—	—	101	118	111	12
Calibre	—	—	—	—	113	114	6
Condo	104	92	101	96	100	98	22
Coolah	101	107	108	103	110	106	22
Coota	—	—	118	103	111	108	15
DS Faraday	99	100	98	101	100	100	22
EG Titanium	—	103	109	96	104	101	19
EGA_Gregory	100	100	100	100	100	100	22
Elmore CL Plus	99	98	103	96	107	101	22
Jillaroo	—	—	—	—	111	110	6
LG Gold	—	—	96	95	93	94	15
LRPB Flanker	101	99	97	101	101	100	22
LRPB Gauntlet	99	92	105	—	—	96	10
LRPB Hellfire	—	106	109	102	100	102	19
LRPB Impala	99	105	105	101	—	103	16
LRPB Mustang	114	99	114	97	106	104	22
LRPB Oryx	102	97	104	95	104	100	15
LRPB Raider	—	—	—	102	112	106	12
LRPB Reliant	109	102	105	103	102	104	22
LRPB Spitfire	97	99	107	92	93	95	22
Mitch	100	103	104	—	—	104	10
Rockstar	—	—	—	99	116	108	12
Scepter	114	109	120	103	115	110	22
Sunblade CL Plus	—	—	116	107	114	111	15
Suncentral	—	—	110	104	106	106	15
Sunchaser	—	102	107	100	99	101	19
Sunmaster	—	—	—	107	113	111	12
Sunprime	110	103	112	99	103	103	22
Suntop	105	101	110	99	106	103	22
Vixen	—	103	122	98	114	109	19
Feed wheats							
Borlaug 100	108	102	103	104	99	103	22
Rebel Rat	—	—	—	108	105	106	12
SEA Condamine	102	103	97	107	98	102	22

North west

Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	1.82	1.80	1.35	4.00	5.47	3.33	
Beckom	117	100	114	108	106	108	26
Boree	—	—	—	109	110	111	14
Calibre	—	—	—	—	113	116	7
Condo	110	89	95	98	99	99	26
Coolah	110	104	101	103	106	105	26
Coota	—	—	113	109	107	109	17
DS Faraday	100	101	99	100	101	100	26
EG Titanium	—	102	99	100	96	98	20
EGA_Gregory	100	100	100	100	100	100	26
Elmore CL Plus	106	99	93	97	100	99	26
Jillaroo	—	—	—	—	109	112	7
LG Gold	—	—	90	95	94	95	17
LRPB Flanker	101	101	102	99	102	101	26
LRPB Gauntlet	95	90	87	—	—	93	12
LRPB Hellfire	—	100	110	104	100	103	20
LRPB Impala	110	105	102	100	102	103	19
LRPB Mustang	115	95	110	105	102	105	26
LRPB Oryx	108	—	—	—	—	99	6
LRPB Raider	—	—	—	103	109	106	14
LRPB Reliant	110	100	112	105	105	105	26
LRPB Spitfire	98	90	92	98	88	93	26
Mitch	111	100	95	—	—	104	12
Rockstar	—	—	—	106	110	109	14
Scepter	120	104	116	110	109	111	26
Sunblade CL Plus	—	—	115	110	112	112	17
Suncentral	—	—	108	106	107	108	17
Sunchaser	—	94	103	103	100	102	20
Sunmaster	—	—	—	110	111	112	14
Sunprime	113	98	111	105	101	104	26
Suntop	113	94	98	103	103	103	26
Vixen	—	100	118	109	107	109	20
Feed wheats							
Borlaug 100	116	95	109	104	105	106	26
Rebel Rat	—	—	—	105	108	108	14
SEA Condamine	114	99	106	102	106	105	26

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	4.34	2.72	1.06	5.52	6.12	4.11	
Beckom	106	113	157	117	105	114	22
Boree	—	—	—	114	105	115	12
Brumby	—	—	—	—	115	116	9
Calibre	—	—	—	114	103	116	12
Catapult	—	116	176	111	102	112	20
Condo	98	100	145	107	103	107	22
Coolah	103	104	98	110	107	107	22
Coota	—	—	140	110	100	107	18
Corack	102	108	157	112	—	110	16
DS Faraday	99	101	103	101	99	100	22
DS Tull	96	99	127	—	—	101	10
EG Titanium	94	102	112	97	93	96	22
EGA_Gregory	100	100	100	100	100	100	22
Elmore CL Plus	98	98	104	105	104	103	22
Emu Rock	94	100	156	—	—	102	10
Hammer CL Plus	—	—	—	98	91	100	12
Jillaroo	—	—	—	—	102	111	6
LG Gold	—	—	—	94	93	95	12
LRPB Anvil CL Plus	—	—	—	—	96	109	6
LRPB Cobra	93	98	115	114	—	108	16
LRPB Flanker	103	102	102	103	103	103	22
LRPB Hellfire	—	100	133	99	94	99	20
LRPB Impala	104	101	142	102	—	106	16
LRPB Mustang	96	102	140	106	99	104	22
LRPB Oryx	99	—	149	106	103	107	17
LRPB Parakeet	92	—	137	93	95	97	20
LRPB Raider	—	—	—	107	100	104	12
LRPB Reliant	93	99	137	92	91	95	22
LRPB Spitfire	82	91	112	95	93	94	22
Mace	96	103	—	—	—	107	4
Razor CL Plus	96	100	164	109	103	109	22
Rockstar	—	—	175	119	110	119	18
Scepter	111	116	180	118	107	117	22
Sunblade CL Plus	—	—	133	117	106	112	18
Suncentral	—	—	126	115	104	109	18
Sunchaser	—	100	135	104	98	103	20
Sunmaster	—	—	126	122	108	113	18
Sunprime	95	102	145	100	95	101	22
Suntop	95	101	109	—	102	105	16
Vixen	108	115	193	117	105	116	22

South west ④							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% EGA_Gregory (t/ha)	4.46	4.25	2.62	4.47	5.31	4.27	
Ballista	—	—	139	111	115	116	25
Beckom	109	110	137	115	114	116	32
Boree	—	—	—	113	116	117	18
Brumby	—	—	—	—	115	116	9
Calibre	—	—	—	113	117	118	18
Catapult	—	110	140	111	114	116	29
Condo	101	103	114	105	105	106	32
Coolah	105	102	118	107	107	108	32
Coota	—	—	136	110	109	112	25
Corack	105	107	125	112	—	112	23
DS Faraday	100	101	104	—	—	102	14
DS Tull	101	101	124	—	—	104	14
EG Titanium	—	103	121	101	101	104	29
EGA_Gregory	100	100	100	100	100	100	32
Elmore CL Plus	101	101	115	102	102	104	32
Emu Rock	100	103	125	—	—	106	14
Hammer CL Plus	—	—	—	103	104	106	18
Jillaroo	—	—	—	—	111	113	9
LG Gold	—	—	104	98	98	99	25
LRPB Anvil CL Plus	—	—	—	—	112	114	9
LRPB Cobra	102	102	132	111	108	111	32
LRPB Flanker	102	101	105	102	103	102	32
LRPB Hellfire	—	104	122	103	102	105	29
LRPB Impala	102	102	114	99	—	103	23
LRPB Mustang	101	104	117	106	105	106	32
LRPB Oryx	101	104	118	103	105	106	11
LRPB Parakeet	97	100	116	95	99	100	30
LRPB Raider	—	—	—	107	106	109	18
LRPB Reliant	97	102	108	98	99	100	32
LRPB Spitfire	95	99	123	99	99	102	32
Mace	102	107	—	—	—	110	7
Razor CL Plus	102	105	127	108	108	110	32
Rockstar	—	—	147	114	117	119	25
Scepter	111	111	139	115	117	118	32
Sunblade CL Plus	—	—	141	114	112	115	25
Suncentral	—	—	133	113	111	113	25
Sunchaser	—	104	110	104	101	103	29
Sunmaster	—	—	138	118	113	117	25
Sunprime	100	104	117	103	104	105	32
Suntop	102	103	124	—	106	108	23
Vixen	110	111	144	115	117	119	32
Feed wheats							
RGT Zanzibar	109	104	126	112	109	112	25

④ Includes irrigated and dryland variety trials

Durum

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Caparoi (t/ha)	2.87	2.2	1.06	3.68	4.82	3.34	
Caparoi	100	100	100	100	100	100	11
DBA_Aurora	110	105	111	104	105	106	11
DBA_Bindaroi	106	102	99	102	104	103	11
DBA_Lillaroi	95	95	89	96	94	95	11
DBA_Mataroi	111	104	102	103	106	106	11
DBA_Vittaroi	102	100	87	101	105	102	11
Jandaroi	94	91	84	92	88	90	11
Westcourt	—	107	109	105	108	108	9

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Caparoi (t/ha)	1.88	—	1.08	2.97	5.36	2.98	
Caparoi	100	—	100	100	100	100	11
DBA_Aurora	110	—	106	106	109	108	11
DBA_Bindaroi	101	—	98	103	102	102	11
DBA_Lillaroi	92	—	91	94	87	90	11
DBA_Mataroi	105	—	99	106	105	105	11
DBA_Vittaroi	93	—	91	102	98	98	11
Jandaroi	88	—	83	88	75	82	11
Westcourt	110	—	104	109	111	110	8

South west ④							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Caparoi (t/ha)	1.01	4.29	3.47	5.49	6.22	4.77	
Bitalli	94	—	103	103	103	102	12
Caparoi	100	100	100	100	100	100	14
DBA_Aurora	104	103	104	102	102	103	14
DBA_Bindaroi	98	99	101	101	101	101	14
DBA_Lillaroi	101	95	93	95	93	94	14
DBA_Mataroi	99	99	102	102	101	101	14
DBA_Vittaroi	88	95	101	102	103	101	14
Jandaroi	109	90	86	89	82	86	14
Westcourt	—	102	105	103	103	103	13

④ Includes irrigated and dryland variety trials

Barley		Quality classification	Grain yield % of LaTrobe				Disease resistance ratings					
Variety			North east	North west	South east	South west	Leaf scald	Net blotch net form	Net blotch spot form	Powdery mildew	Leafrust	Crown rot
Beast	A quick maturing, high yielding barley suited to low-medium rainfall environments. Beast is 1–2 days quicker to reach awn peep than Spartacus CL. A similar plant type to Compass with excellent early vigour and a competitive physical grain package make it well adapted to terminal stress conditions and shorter season environments. Released as a feed quality barley. Beast is currently under evaluation with Grains Australia for malt accreditation. AGT.	FEED	104	107	95	102	S-VS	MR & S	MS-S	MS-S	MS-S	S
	New feed barley, high yielding, quick-maturity midazoline (MI) tolerant variety suited to lighter soils and medium-low rainfall environments. Agronomically similar to Compass. Similar lodging tolerance and head loss risk to Compass, which might require in-season agronomic management. Excellent grain size with high retention levels and low screening. Moderate hectolitre weight. Under evaluation by Grains Australia for malt accreditation. Bred and marketed by InterGrain.	FEED	966	102	86	96	S-VS	MR-MS	MS-S	MS	MS	MS-S ①
	A quick-mid maturing high and stable yielding barley, slightly slower than Spartacus CL. It has a short plant type similar to LaTrobe, reducing lodging susceptibility compared with taller varieties. Widely adapted to a range of environmental conditions across NSW and has a competitive physical grain package. Released as a feed quality barley. Cyclops is currently under evaluation by Grains Australia for malt accreditation. AGT.	FEED	104	105	107	108	S-VS	MR & S	MS-S	MS-S	S	S ①
Cyclops	Slower maturity barley, longer season than RGT Planet. Marketed by AGF Seeds.	FEED	—	—	—	—	MS-S ①	MS ①	S ①	R	MR ①	—
	Released through SECOBRA Researches as a competitive yielding feed type and is under evaluation for malt accreditation with Grains Australia. Competitive growth habit with medium plant height. Laperouse is a spring type barley – when sown in a main season sowing time, maturity is typically between Compass and RGT Planet. Laperouse has shown a low incidence of head-loss and good physical grain quality. Commercialised by Seednet.	FEED	109	110	100	102	S-VS	MR-MS & S	MR-MS	MS	S-VS	S

① Provisional

& Where ratings are separated by '&', the first is correct for the majority of situations, but different pathotypes are known to exist and the latter rating reflects the response to these pathotypes.

Barley		Quality classification	Grain yield % of LaTrobe										Disease resistance ratings				
			North east	North west	South east	South west	Leaf scald	Net blotch net form	Net blotch spot form	Powdery mildew	Leaf rust	Crown rot	MS-S	MS	MS	MS-S	S
Variety	A quick-mid maturing IMI tolerant, high yielding barley.	MALT	111	107	104	102	S	MR-MS	MS	MS	MS	MS	MS-S	MS	MS	MS-S	S
Maximus CL	A quick-mid maturing IMI tolerant, high yielding barley. Maximus CL is similar to Spartacus CL with an erect plant type, strong lodging tolerance and low-medium head loss risk. Maximus CL has a short coleoptile and it is recommended that sowing depth be adjusted accordingly. The variety also has a good physical grain package, slightly improved over Spartacus CL. Bred and marketed by InterGrain.																
Minotaur	A mid-slow maturity variety slightly later than RGT Planet. Suited to medium-high rainfall environments. Minotaur has a good physical grain package with improved test weight, screenings and retention compared with RGT Planet. Released as a feed quality barley, Minotaur is currently under evaluation by Grains Australia for malt accreditation. AGT.	FEED	108	111	108	107	S-VS	MR & MS	S	S	S	S-VS	MS-1				
NEW Titan AX (AGTB0325)	World first CoAXium barley variety that is tolerant to Spicam Aggressor® (Group 1, quizalofop-P-Ethyl) herbicide offering an alternative to Clearfield® technology. A mid season maturing, high yielding barley derived from Compass suited to medium-low rainfall environments. Titan AX ⁽¹⁾ reaches awn peep slightly later than Compass and similar to RGT Planet. Agronomically similar to Compass with similar height and lodging tolerance that might require in-season agronomic management in some environments. Excellent grain package with low screenings and good retention. Titan AX will enter Grains Australia malt evaluation in 2023. AGT.	FEED	-	-	-	-	S-VS 1	MR-MS 1	MS-S 1	MR-MS	S-VS 1	-					
Yeti	A high yielding barley variety released for northern NSW. Yeti is closely related to Compass and has a robust physical grain package with low screenings and high retention. Shorter plant height compared with Compass, Yeti offers improved lodging resistance. Released as a feed quality barley, Yeti is currently under evaluation by Grains Australia for malt accreditation. AGT.	FEED	115	114	100	102	VS	MR & S	MR-MS	MS-S	S-VS	MS	MS-S	MS	MS-S	MS	S-1
NEW Zena CL (IGB201257)	Zena CL ⁽¹⁾ is an IMI-tolerant barley. It is closely related to RGT Planet, hence is similar agronomically, with the added herbicide tolerance. Suited to the medium-high rainfall environments, the variety has good levels of resistance to powdery mildew and leaf rust. Net form and spot form of net blotch will need to be monitored. Zena CL has been accepted into the Grains Australia malt accreditation program. Seed available for planting in 2023. Bred and marketed by InterGrain.	FEED	105	111	106	103	S 1	MS-S 1	MR-MS & S 1	R	MS 1	-					

1 Provisional

& Where ratings are separated by '&', the first is correct for the majority of situations, but different pathotypes are known to exist and the latter rating reflects the response to these pathotypes.

Summary of across sites analysis yield data 2017–2021

Data is sourced from the National Variety Trials, additional grain yield information on varieties is available from the National Variety Trial website (www.acasnvt.com.au). The tables presents NVT 'Production Value' MET data on a yearly regional mean and combined regional mean basis.

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% LaTrobe (t/ha)	3.55	2.15	0.86	4.19	3.91	3.15	
Alestar ⑤	74	114	54	95	101	97	14
Beast	—	—	91	104	98	104	10
Bottler ⑤	88	120	77	103	103	104	14
Commander ⑤	86	113	50	92	97	95	14
Commodus CL	—	—	—	95	94	96	8
Compass ⑤	106	117	93	100	95	101	14
Cyclops	—	—	—	108	111	104	8
Fathom	109	96	85	104	101	101	14
GrangeR ⑤	—	—	63	—	—	105	2
Hindmarsh	107	106	116	120	109	113	6
LaTrobe ⑤	100	100	100	100	100	100	14
Laperouse	104	113	81	116	105	109	14
Leabrook ⑤	109	122	75	105	99	104	14
Maximus CL ⑤	—	100	84	121	109	111	13
Minotaur	—	—	—	—	112	108	4
Nitro	—	—	—	105	—	103	4
RGT Planet ⑤	93	124	74	108	108	108	14
Rosalind	99	111	86	110	104	106	14
Shepherd	85	110	55	—	—	111	6
Spartacus CL ⑤	99	95	110	107	104	104	14
Yeti	—	—	100	122	104	115	10
Zena CL	—	—	—	—	110	105	4

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% LaTrobe (t/ha)	1.98	2.44	1.43	4.13	4.99	3.28	
Alestar ⑤	96	107	76	97	111	102	18
Beast	—	—	105	105	105	107	12
Bottler ⑤	103	112	89	101	116	108	18
Commander ⑤	103	110	82	100	105	102	18
Commodus CL	—	—	—	100	100	102	9
Compass ⑤	114	114	104	100	99	103	18
Cyclops	—	—	—	106	113	105	9
Fathom	105	102	101	105	99	102	18
GrangeR ⑤	100	112	81	—	—	110	9
Hindmarsh	105	105	108	—	—	109	9
LaTrobe ⑤	100	100	100	100	100	100	18
Laperouse	112	113	99	106	113	110	18
Leabrook ⑤	116	118	100	107	109	110	18
Maximus CL ⑤	—	105	100	105	111	107	15
Minotaur	—	—	—	108	121	111	8
Nitro	—	—	—	102	—	108	4
RGT Planet ⑤	104	114	89	106	125	114	18
Rosalind	106	109	97	103	111	107	18
Shepherd	90	104	78	—	—	117	9
Spartacus CL ⑤	97	96	102	99	102	100	18
Yeti	—	—	114	109	113	114	12
Zena CL	—	—	—	—	126	111	5

⑤ May be accepted as malt. Accredited by Grains Australia.

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% LaTrobe (t/ha)	—	—	2.06	5.12	4.39	3.40	
Alestar ⑤	—	—	78	97	104	94	4
Beast	—	—	109	91	85	95	4
Bottler ⑤	—	—	85	100	104	97	4
Commander ⑤	—	—	89	89	87	88	4
Commodus CL	—	—	—	79	81	86	2
Compass ⑤	—	—	103	80	81	87	4
Cyclops	—	—	—	113	98	107	2
Fandaga	—	—	—	—	106	101	1
Fathom	—	—	101	90	95	95	4
GrangeR ⑤	—	—	81	—	—	96	2
Hindmarsh	—	—	104	—	—	103	2
LaTrobe ⑤	—	—	100	100	100	100	4
Laperouse	—	—	103	107	88	100	4
Leabrook ⑤	—	—	104	88	86	92	4
Maximus CL ⑤	—	—	105	110	94	104	4
Minotaur	—	—	—	118	102	108	2
Nitro	—	—	87	107	—	100	3
RGT Planet ⑤	—	—	87	113	119	107	4
Rosalind	—	—	103	112	106	107	4
Spartacus CL ⑤	—	—	102	105	95	101	4
Yeti	—	—	107	105	87	100	4
Zena CL	—	—	—	—	114	106	1

South west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% LaTrobe (t/ha)	3.29	1.54	2.20	4.86	5.51	4.17	
Alestar ⑤	86	76	72	98	93	92	19
Beast	—	—	109	99	101	102	16
Bottler ⑤	91	82	80	101	98	96	19
Commander ⑤	95	87	77	96	96	94	19
Commodus CL	—	—	—	93	96	96	12
Compass ⑤	105	105	101	94	97	97	19
Cyclops	—	—	—	110	108	108	12
Fathom	102	101	103	97	100	100	19
GrangeR ⑤	88	79	73	—	—	93	7
Hindmarsh	102	104	104	—	—	102	7
LaTrobe ⑤	100	100	100	100	100	100	19
Laperouse	103	103	96	106	100	102	19
Leabrook ⑤	106	105	103	99	101	101	19
Maximus CL ⑤	—	107	103	105	99	102	17
Minotaur	—	—	—	112	106	107	12
Nitro	—	—	83	106	—	100	10
RGT Planet ⑤	94	83	89	109	107	104	19
Rosalind	103	103	107	108	105	106	19
Spartacus CL ⑤	101	103	100	102	97	100	19
Yeti	—	—	103	104	99	102	16
Zena CL	—	—	—	—	106	103	6

⑤ May be accepted as malt. Accredited by Grains Australia.

Oats

Variety	Grain yield % of Mitika				Disease resistance ratings				
	North east	North west	South east	South west	Leaf (crown) rust	Stem rust	Barley yellow dwarf virus	Red leather leaf	Septoria blotch
Bilby	109	–	110	109	MS–S	S	S	S	S–VS
Koala <small>(09143-35)</small>	113	–	113	109	MS	S	S	S	MS–S
Kowari	102	–	105	105	S	S	S	S	S

Summary of across sites analysis yield data 2017–2021

Data is sourced from the National Variety Trials, additional grain yield information on varieties is available from the National Variety Trial website (www.acasnvt.com.au). The tables present NVT 'Production Value' MET data on a yearly regional mean and combined regional mean basis.

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Mitika (t/ha)	—	2.34	—	4.26	5.12	3.31	
Bannister	—	111	—	117	120	117	5
Bilby	—	106	—	111	107	109	5
Durack	—	102	—	97	97	98	5
Koala	—	118	—	110	118	113	5
Koorabup	—	116	—	99	109	105	5
Kowari	—	100	—	104	100	102	5
Mitika	—	100	—	100	100	100	5
Williams	—	104	—	116	123	115	5
Yallara	—	117	—	102	108	107	5

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Mitika (t/ha)	1.95	2.65	1.40	4.62	4.68	3.25	
Bannister	120	108	92	116	120	114	16
Bilby	111	109	108	107	114	110	16
Durack	97	101	100	90	89	92	16
Koala	128	101	69	119	120	113	16
Koorabup	110	101	75	89	83	88	16
Kowari	102	103	107	103	107	105	16
Mitika	100	100	100	100	100	100	16
Williams	111	102	87	117	113	110	16
Yallara	111	106	85	86	86	90	16

South west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Mitika (t/ha)	2.26	—	1.52	3.56	4.48	2.95	
Bannister	113	—	108	111	110	111	8
Bilby	111	—	107	112	107	109	8
Durack	98	—	99	92	94	95	8
Koala	105	—	94	110	115	109	8
Koorabup	96	—	95	82	93	91	8
Kowari	104	—	103	107	103	105	8
Mitika	100	—	100	100	100	100	8
Williams	109	—	110	102	105	105	8
Yallara	101	—	99	87	93	93	8

Canola – new varieties for 2023

Fourteen new canola varieties will be on the market for 2023: one conventional, 6 triazine tolerant, 2 Clearfield, 3 TruFlex (RR), 1 TruFlex + Clearfield variety, and one Clearfield + triazine tolerant variety.

The maturity statements about varieties relate to physiological maturity and have been provided by the seed companies.

Canola varieties vary markedly in response (i.e. early vigour, accumulation of biomass, start of flowering and maturity) to sowing date and seasonal conditions. Phenology responses may not reflect maturity ratings. For early sowing select a variety that is not quick to flower. Information on the response of varieties to early sowing and optimal flowering dates for environments in NSW is available on the GRDC website:

Ten tips to early sown canola (<https://grdc.com.au/10TipsEarlySownCanola>).

20 tips for profitable canola – central & southern NSW (<https://grdc.com.au/resources-and-publications/all-publications/publications/2019/20-tips-for-profitable-canola-central-and-southern-nsw>).

Spring 2022 Blackleg resistance ratings (<https://grdc.com.au/resources-and-publications/all-publications/factsheets/2022/blackleg-management-guide>) are now available on the GRDC website.

Variety descriptions have been provided by the seed companies. This information will be updated before inclusion in the NSW DPI *Winter crop variety sowing guide 2023*.

Conventional varieties

Outlaw (coded AGTC0017). Early maturing open-pollinated (OP) conventional canola suited to medium-low rainfall zones. Tall plant height similar to AV Garnet. No blackleg resistance rating or resistance group, not tested in NVT trials. Eligible for AGT Seed Sharing™. Marketed by AGT. EPR \$10.00/t (ex. GST).

Triazine tolerant (TT) varieties

Bandit TT (coded AGTC0006). Early maturing (OP) TT, similar maturity to ATR Stingray. Adapted to medium–low rainfall environments. Medium plant height. Blackleg resistance rating MS and resistance group A. Tested in NVT trials in 2021 and 2022. Eligible for AGT Seed Sharing™. Marketed by AGT. EPR \$10.00/t (ex. GST).

DG Torrens TT (coded DG 1924TT). Early–mid maturing OP TT. Short–medium plant height. Suited to low–medium rainfall zones. Blackleg resistance rating R–MR and resistance group H. Tested in NVT trials 2020–2022. Bred and marketed by Nutrien Ag Solutions. EPR \$5.00/t (ex. GST).

HyTTec Velocity (coded NCH19T588). Early maturing hybrid, 2–4 days earlier than HyTTec Trident. Fast phenology offers an earlier alternative to HyTTec Trident. Suited to low–medium rainfall zones. Medium height with improved standability over HyTTec Trident. Blackleg resistance rating MR–MS and resistance group AB. Tested in NVT trials 2020–2022. Marketed by Nuseed Pty Ltd. EPR \$5.00/t (ex. GST).

InVigor T4511 (coded CHYB4372TT). Early–mid TT hybrid of medium height. Strong early vigour suited to early and mid season growing regions. Better blackleg resistance than InVigor T 4510. Blackleg resistance rating R and resistance group currently unknown. Tested in NVT trials 2021 and 2022. Marketed by BASF.

Renegade TT (coded AGTC0034). Early–mid maturing OP TT, slightly earlier than ATR Bonito. Short to medium plant height. Blackleg resistance rating MR–MS and resistance group A. Tested in NVT trials 2021 and 2022. Eligible for AGT Seed Sharing™. Marketed by AGT. EPR \$10.00/t (ex. GST).

RGT Baseline™ TT (coded SFR65-059TT). Mid maturing TT hybrid. Suited to medium to high rainfall zones. Medium–tall height. Blackleg rating MR–MS and resistance group B. Tested in NVT in 2021 and 2022. Marketed by Seed Force, an RAGT Company. EPR \$10.00/t (ex. GST).

Imidazolinone tolerant (CLEARFIELD®) varieties

Hyola® Solstice CL (coded PS-21CL208). Mid maturing hybrid. Suited to medium–high rainfall zones. Blackleg resistance rating R–MR and resistance group ADFH. Tested in NVT trials 2021 and 2022. Bred and marketed by Pacific Seeds.

RGT CLAVIER™ CL. Late maturing winter dual-purpose hybrid with very high biomass and tall plant height. Adapted to high to very high rainfall zones. Blackleg resistance rating R and resistance group currently not known. Not tested in NVT. Marketed by Seed Force an RAGT company. EPR \$12.00/t (ex. GST).

Roundup Ready®

NIL

TruFlex® with Roundup Ready® Technology

Nuseed Eagle TF (coded NCH20Q732). Mid-maturing Truflex® hybrid, 1–2 days later than Nuseed Condor TF with mid phenology. Nuseed Eagle TF is a potential replacement for Nuseed Condor TF with slightly improved yields in higher rainfall zones. Blackleg resistance rating R and resistance group ABD. Tested in NVT trials 2021 and 2022. Marketed by Nuseed Pty Ltd.

Nuseed Hunter TF (coded NCH20Q733). Early–mid maturing Truflex® hybrid, with mid–fast phenology. Nuseed Hunter TF is a later alternative to Nuseed Emu TF and is suited to low–medium rainfall zones. Medium plant height. Blackleg resistance rating R–MR and blackleg resistance group AB. Tested in NVT trials 2021 and 2022. Marketed by Nuseed Pty Ltd.

DG Hotham TF (coded DG2103XX). Mid maturing Truflex® hybrid. Medium–tall plant height. Suited to medium–high rainfall zones. Blackleg resistance rating R and resistance grouping ABH. Tested in NVT trials 2021 and 2022. Bred and marketed by Nutrien Ag Solutions.

TruFlex® with Roundup Ready® Technology plus IMI tolerance

Hyola® Regiment XC (coded PS-21XC316). Mid maturing Truflex® + Clearfield® (Imidazolinone) hybrid. Suited to medium–high rainfall zones. Blackleg resistance rating R and resistance group ADFH. Tested in NVT trials in 2021 and 2022. Bred and marketed by Pacific Seeds.

IMI tolerance plus triazine tolerance

PY520TC (coded AA0419E). Mid maturing Clearfield® + Triazine tolerant hybrid variety. Suited to medium–high rainfall zones. Mid–fast phenology. Medium height. Blackleg resistance rating MR, resistance group BC. Tested in NVT trials 2021 and 2022. Marketed by Pioneer Seeds.

South west									
Early maturing triazine tolerant (TT) – mean yield expressed as % of HyTTec Trident									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trident t/ha	–	0.64	1.38	3.07	3.51	2.20			
ATR Bluefin	–	–	–	78	77	75	3	46.2	2
ATR Bonito	–	52	67	85	83	81	7	46.9	2
ATR Stingray	–	58	64	77	78	75	7	45.9	2
Bandit TT	–	–	–	92	91	89	2	44.7	2
HyTTec Trident	–	100	100	100	100	100	7	44.9	2
HyTTec Trophy	–	82	–	102	96	98	6	44.7	2
HyTTec Velocity	–	–	–	94	–	95	1	–	–
InVigor LT 4530P	–	–	–	94	93	91	4	44.7	2
InVigor T 4510	–	75	93	96	95	94	7	44.9	2
InVigor T 4511	–	–	–	–	95	92	2	45.7	2
Monola 422TT	–	–	–	77	80	77	4	46.2	2
Monola H421TT	–	–	77	74	79	76	5	45.2	2
Renegade TT	–	–	–	–	87	87	1	46.0	1
RGT Capacity TT	–	–	–	100	92	94	4	44.1	2
SF Spark TT	–	–	84	89	88	87	5	46.9	2
Early maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 43Y92 (CL)									
Pioneer 43Y92 (CL) t/ha	–	0.63	1.08	3.20	3.54	2.20			
Hyola Solstice CL	–	–	–	–	99	100	2	46.8	2
Pioneer 43Y92 (CL)	–	100	100	100	100	100	7	45.9	2
Pioneer 44Y94 (CL)	–	–	–	–	105	104	2	46.0	2
VICTORY V7002CL	–	97	86	83	91	88	7	45.8	2
Early maturing Roundup Ready trials – mean yield expressed as % Pioneer 44Y27 (RR)									
Pioneer 44Y27 (RR) t/ha	–	0.64	1.43	3.04	3.38	2.16			
Hyola 410XX	–	–	–	105	93	97	5	47.2	2
Hyola Battalion XC	–	–	–	97	94	96	4	45.2	2
Hyola Regiment XC	–	–	–	–	102	106	2	46.7	2
InVigor R 3520	–	86	90	89	93	91	7	46.2	2
InVigor R 4022P	–	–	95	101	99	99	5	46.8	2
InVigor R 4520P	–	–	92	103	102	100	5	45.1	2
Nuseed Emu TF	–	–	–	87	95	94	4	46.3	2
Nuseed Hunter TF	–	–	–	–	105	106	1	44.8	1
Nuseed Raptor TF	–	–	–	107	104	105	4	45.6	2
Pioneer 44Y27 (RR)	–	100	100	100	100	100	6	45.5	2
Pioneer 44Y30 (RR)	–	–	–	–	102	104	2	46.7	2

⑥ Oil content, adjusted to 6.0% moisture content, is expressed as a region-wide average for each herbicide chemistry and maturity group in 2021 only.

– Insufficient or no data available.

North west									
Early maturing triazine tolerant (TT) – mean yield expressed as % of HyTTec Trident									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trident t/ha	0.89	–	–	2.22	3.20	1.80			
ATR Bluefin	–	–	–	83	–	74	1	–	–
ATR Bonito	65	–	–	95	–	82	3	–	–
Bandit TT	–	–	–	–	90	93	1	47.0	1
HyTTec Trident	100	–	–	100	100	100	3	47.7	1
HyTTec Trophy	78	–	–	95	97	92	4	46.2	1
HyTTec Velocity	–	–	–	–	97	95	1	48.1	1
InVigor LT 4530P	–	–	–	107	93	94	2	46.8	1
InVigor T 4510	79	–	–	96	95	91	4	47.6	1
InVigor T 4511	–	–	–	–	94	95	1	48.6	1
Monola 422TT	–	–	–	81	81	78	2	47.5	1
Monola H421TT	–	–	–	76	81	75	2	47.3	1
Renegade TT	–	–	–	–	88	83	1	47.8	1
SF Spark TT	–	–	–	89	89	84	2	50.4	1
Early maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 43Y92 (CL)									
Pioneer 43Y92 (CL) t/ha	0.76	–	–	2.24	3.55	1.83			
Hyola Solstice CL	–	–	–	–	100	94	1	50.1	1
Pioneer 43Y92 (CL)	100	–	–	100	100	100	4	47.2	1
Pioneer 44Y94 (CL)	–	–	–	–	104	106	1	47.7	1
VICTORY V7002CL	109	–	–	94	92	96	4	47.6	1
Early maturing Roundup Ready trials – mean yield expressed as % Pioneer 44Y27 (RR)									
Pioneer 44Y27 (RR) t/ha	0.93	–	–	2.32	2.98	2.08			
DG Lofty TF	–	–	–	–	93	91	1	47.5	1
Hyola 410XX	–	–	–	84	95	87	2	50.6	1
Hyola Battalion XC	–	–	–	91	95	93	2	48.1	1
Hyola Regiment XC	–	–	–	–	104	97	1	52.1	1
InVigor R 3520	92	–	–	96	92	94	3	49.3	1
InVigor R 4022P	–	–	–	105	99	100	2	49.5	1
InVigor R 4520P	–	–	–	117	101	106	2	47.7	1
Nuseed Emu TF	–	–	–	85	95	94	2	48.4	1
Nuseed Raptor TF	–	–	–	113	103	109	2	47.7	1
Pioneer 44Y27 (RR)	100	–	–	100	100	100	3	48.4	1
Pioneer 44Y30 (RR)	–	–	–	–	103	98	1	49.1	1
North east									
Early maturing triazine tolerant (TT) – mean yield expressed as % of HyTTec Trident									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trident t/ha	–	–	–	1.22	–	1.22			
ATR Bonito	–	–	–	66	–	69	3	–	–
HyTTec Trident	–	–	–	100	–	100	1	–	–
HyTTec Trophy	–	–	–	94	–	87	3	–	–
InVigor T 4510	–	–	–	85	–	80	3	–	–
SF Spark TT	–	–	–	69	–	66	1	–	–
Early maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 43Y92 (CL)									
Pioneer 43Y92 (CL) t/ha	0.69	1.41	–	1.21	–	1.11			
Pioneer 43Y92 (CL)	100	100	–	100	–	100	3	–	–
VICTORY V7002CL	93	78	–	70	–	78	3	–	–

⑥ Oil content, adjusted to 6.0% moisture content, is expressed as a region-wide average for each herbicide chemistry and maturity group in 2021 only.

– Insufficient or no data available.

South west									
Mid maturing triazine tolerant (TT) trials – mean yield expressed as % of HyTTec Trophy									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trophy t/ha	0.97	0.97	0.86	3.16	2.93	1.78			
ATR Bluefin	–	–	–	80	81	71	4	43.7	2
ATR Bonito	45	56	–	87	85	76	8	45.3	2
ATR Stingray	42	52	–	84	83	73	7	44.1	2
Bandit TT	–	–	–	–	87	80	1	44.5	1
DG Bidgee TT	–	–	–	–	92	87	2	42.5	2
DG Torrens TT	–	–	–	95	92	87	4	44.7	2
Hyola Blazer TT	–	–	94	105	101	100	5	44.1	2
Hyola Enforcer CT	–	–	–	94	97	96	4	44.2	2
HyTTec Trident	120	121	114	98	103	106	10	44.4	2
HyTTec Trifecta	–	103	–	104	103	104	6	45.1	2
HyTTec Trophy	100	100	100	100	100	100	10	43.2	2
InVigor LT 4530P	–	–	–	93	93	89	4	42.8	2
InVigor T 4510	87	87	97	97	97	95	10	43.7	2
InVigor T 4511	–	–	–	–	99	99	2	44.8	2
Monola 422TT	–	–	–	82	85	78	4	44.6	2
Monola H421TT	–	–	82	81	88	83	5	44.7	2
Renegade TT	–	–	–	–	89	83	1	45.4	1
RGT Baseline TT	–	–	–	–	95	90	1	42.8	1
RGT Capacity TT	–	–	86	98	95	91	6	43.0	2
SF Dynatron TT	–	–	83	101	96	91	6	45.6	2
SF Ignite TT	–	71	–	–	–	88	2	–	–
Mid maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 44Y94 (CL)									
Pioneer 44Y94 (CL) t/ha	–	–	–	3.43	3.25	1.89			
Hyola Equinox CL	–	–	–	91	98	99	4	46.4	2
Hyola Solstice CL	–	–	–	–	101	104	2	45.0	2
Pioneer 43Y92 (CL)	–	–	–	92	96	94	10	45.0	2
Pioneer 44Y94 (CL)	–	–	–	100	100	100	4	43.9	2
Pioneer 45Y95 (CL)	–	–	–	–	101	100	2	46.0	1
VICTORY V7002CL	–	–	–	84	87	79	10	43.8	2
VICTORY V75-03CL	–	–	–	86	89	82	8	42.6	2
Mid maturing Roundup Ready trials – mean yield expressed as % InVigor R 4520P									
InVigor R 4520P t/ha	–	–	1.07	3.33	3.12	1.88			
DG Bindo TF	–	–	–	–	93	90	2	45.0	2
DG Lofty TF	–	–	–	–	91	86	2	45.0	2
Hyola 410XX	–	–	83	89	94	92	6	46.1	2
Hyola Battalion XC	–	–	–	90	96	96	4	44.9	2
Hyola Garrison XC	–	–	87	92	97	97	6	45.7	2
Hyola Regiment XC	–	–	–	–	102	104	2	46.0	2
InVigor R 4022P	–	–	95	94	97	95	6	45.6	2
InVigor R 4520P	–	–	100	100	100	100	6	44.3	2
Nuseed Condor TF	–	–	96	100	–	104	4	–	–
Nuseed Emu TF	–	–	–	85	96	97	4	45.0	2
Nuseed Hunter TF	–	–	–	–	101	104	1	46.6	1
Nuseed Raptor TF	–	–	92	96	100	101	6	44.0	2
Pioneer 44Y27 (RR)	–	–	94	93	98	97	10	44.2	2
Pioneer 44Y30 (RR)	–	–	–	–	98	97	2	45.1	2
VICTORY V5003RR	–	–	60	85	88	81	10	42.8	2
VICTORY V55-04TF	–	–	–	–	93	89	2	42.9	2

⑥ Oil content, adjusted to 6.0% moisture content, is expressed as a region-wide average for each herbicide chemistry and maturity group in 2021 only.

– Insufficient or no data available.

North west									
Mid maturing triazine tolerant (TT) trials – mean yield expressed as % of HyTTec Trophy									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trophy t/ha)	1.64	–	–	2.81	3.14	2.53			
ATR Bluefin	–	–	–	81	80	78	2	49.2	1
ATR Bonito	72	–	–	91	84	84	3	50.9	1
ATR Stingray	–	–	–	85	82	79	2	47.9	1
Bandit TT	–	–	–	–	86	85	1	47.9	1
DG Bidgee TT	–	–	–	–	94	87	1	48.2	1
Hyola Blazer TT	–	–	–	107	101	101	2	50.5	1
Hyola Enforcer CT	–	–	–	89	98	94	2	50.8	1
HyTTec Trident	–	–	–	93	104	102	2	48.2	1
HyTTec Trifecta	–	–	–	104	103	103	2	50.1	1
HyTTec Trophy	100	–	–	100	100	100	3	47.8	1
InVigor T 4510	98	–	–	100	96	98	3	48.9	1
InVigor T 4511	–	–	–	–	99	98	1	48.3	1
Monola 420TT	–	–	–	74	84	80	2	49.2	1
Monola 422TT	–	–	–	80	85	82	2	47.9	1
Monola H421TT	–	–	–	77	87	85	2	47.8	1
Renegade TT	–	–	–	–	88	89	1	48.9	1
RGT Capacity TT	–	–	–	–	94	96	1	49.6	1
SF Dynatron TT	–	–	–	–	94	98	1	50.9	1
SF Ignite TT	–	–	–	101	93	91	2	48.6	1
SF Spark TT	–	–	–	90	92	90	2	50.1	1
Mid maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 44Y94 (CL)									
Pioneer 44Y94 (CL) t/ha	–	–	–	2.91	3.08	2.57			
Hyola Equinox CL	–	–	–	81	99	93	2	51.4	1
Hyola Solstice CL	–	–	–	–	102	97	1	51.4	1
Pioneer 43Y92 (CL)	–	–	–	89	95	93	3	49.1	1
Pioneer 44Y94 (CL)	–	–	–	100	100	100	2	49.1	1
VICTORY V7002CL	–	–	–	80	85	81	3	49.6	1
Mid maturing Roundup Ready trials – mean yield expressed as % InVigor R 4520P									
InVigor R 4520P t/ha	–	–	–	3.13	–	2.39			
Hyola Battalion XC	–	–	–	78	–	82	1	–	–
Hyola Garrison XC	–	–	–	80	–	83	1	–	–
InVigor R 4022P	–	–	–	93	–	95	1	–	–
InVigor R 4520P	–	–	–	100	–	100	1	–	–
Nuseed Condor TF	–	–	–	92	–	94	1	–	–
Nuseed Emu TF	–	–	–	76	–	88	1	–	–
Nuseed Raptor TF	–	–	–	87	–	90	1	–	–
Pioneer 44Y27 (RR)	–	–	–	89	–	93	2	–	–
Pioneer 44Y30 (RR)	–	–	–	–	–	–	–	–	–

⑥ Oil content, adjusted to 6.0% moisture content, is expressed as a region-wide average for each herbicide chemistry and maturity group in 2021 only.

– Insufficient or no data available.

North east									
Mid maturing triazine tolerant (TT) trials – mean yield expressed as % of HyTTec Trophy									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ^⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trophy t/ha	1.47	0.99	1.45	2.60	3.48	2.01			
ATR Bonito	70	76	87	94	–	84	5	–	–
DG Bidgee TT	–	–	–	–	85	89	1	44.6	1
DG Torrens TT	–	–	–	105	–	92	1	–	–
Hyola Blazer TT	–	–	–	110	102	104	3	45.4	1
Hyola Enforcer CT	–	–	96	97	87	95	4	46.3	1
HyTTec Trifecta	–	104	–	–	102	105	2	45.5	1
HyTTec Trophy	100	100	100	100	100	100	7	45.1	1
InVigor T 4510	94	96	105	98	97	98	7	45.7	1
InVigor T 4511	–	–	–	–	95	96	1	46.2	1
Monola 420TT	–	–	–	76	72	75	3	46.0	1
Monola 422TT	–	–	–	80	–	77	1	–	–
PY520TC	–	–	–	–	100	95	1	44.3	1
Renegade TT	–	–	–	–	83	90	1	45.8	1
RGT Baseline TT	–	–	–	–	92	94	1	47.0	1
RGT Capacity TT	–	–	104	–	93	99	2	44.9	1
SF Dynatron TT	–	–	–	–	101	100	1	46.0	1
SF Spark TT	–	–	88	92	87	89	4	47.4	1
Mid maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 44Y94 (CL)									
Pioneer 44Y94 (CL) t/ha	–	–	–	2.94	–	2.17			
Hyola Equinox CL	–	–	–	93	–	94	3	46.8	1
Hyola Solstice CL	–	–	–	–	–	100	1	46.4	1
Pioneer 44Y94 (CL)	–	–	–	100	–	100	2	–	–
Pioneer 45Y93 (CL)	–	–	–	108	–	99	6	45.4	1
Pioneer 45Y95 (CL)	–	–	–	–	–	103	2	45.4	1
VICTORY V75-03CL	–	–	–	88	–	82	5	44.8	1

⑥ Oil content, adjusted to 6.0% moisture content, is expressed as a region-wide average for each herbicide chemistry and maturity group in 2021 only.

– Insufficient or no data available.

South east									
Mid maturing triazine tolerant (TT) trials – mean yield expressed as % of HyTTec Trophy									
Variety	Yearly group mean					Regional mean	Number of trials	Oil % ⑥ 2021	Trials
	2017	2018	2019	2020	2021				
HyTTec Trophy t/ha	1.54	1.33	1.27	3.34	3.59	2.24			
ATR Bonito	74	69	71	81	–	76	21	–	–
Bandit TT	–	–	–	–	78	78	3	46.3	6
DG Bidgee TT	–	–	–	–	89	86	6	46.3	6
DG Murray TT	–	–	–	88	85	84	9	46.7	6
DG Torrens TT	–	–	–	92	–	87	6	–	–
Hyola Blazer TT	–	–	99	105	102	102	13	46.5	6
Hyola Enforcer CT	–	–	99	94	94	96	17	46.7	6
HyTTec Trifecta	–	104	105	106	104	105	19	48.4	6
HyTTec Trophy	100	100	100	100	100	100	29	47.6	6
InVigor LT 4530P	–	–	–	92	89	92	10	43.8	5
InVigor T 4510	95	95	100	96	95	96	29	45.1	6
InVigor T 4511	–	–	–	–	97	98	6	46.8	6
InVigor T 6010	–	–	93	99	92	94	17	46.4	6
Monola 420TT	–	73	71	71	73	73	15	49.4	6
Monola 422TT	–	–	–	75	76	75	9	43.3	6
PY520TC	–	–	–	–	96	93	3	45.7	3
Renegade TT	–	–	–	–	83	85	4	45.0	4
RGT Baseline TT	–	–	–	–	93	90	5	49.5	5
RGT Capacity TT	–	–	95	97	93	94	17	47.3	6
SF Dynatron TT	–	–	90	100	95	94	15	47.3	6
SF Ignite TT	89	81	82	98	91	91	27	45.2	6
Mid maturing CLEARFIELD trials – mean yield expressed as % of Pioneer 44Y94 (CL)									
Pioneer 44Y94 (CL) t/ha	–	–	1.30	3.79	3.82	2.49			
Hyola Equinox CL	–	–	–	92	93	98	12	47.4	6
Pioneer 44Y94 (CL)	–	–	100	100	100	100	17	46.3	6
Pioneer 45Y93 (CL)	–	–	90	100	96	96	22	47.2	6
Pioneer 45Y95 (CL)	–	–	103	–	101	102	13	46.6	6
VICTORY V75-03CL	–	–	73	81	80	80	20	43.2	6
Mid maturing Roundup Ready trials – mean yield expressed as % InVigor R 4520P									
InVigor R 4520P t/ha	–	–	1.53	3.68	3.67	2.68			
Hyola Garrison XC	–	–	85	88	93	91	13	48.9	5
Hyola Regiment XC	–	–	–	–	102	99	5	50.0	5
InVigor R 4022P	–	–	93	92	94	93	13	46.5	5
InVigor R 4520P	–	–	100	100	100	100	13	46.7	5
InVigor R 5520P	–	–	80	90	89	88	20	47.5	5
Nuseed Condor TF	–	–	93	98	102	99	13	49.4	5
Nuseed Eagle TF	–	–	–	–	102	101	4	51.7	4
Nuseed Raptor TF	–	–	86	92	99	94	12	48.1	3
Pioneer 44Y30 RR	–	–	–	95	97	95	8	44.9	5
Pioneer 45Y28 RR	–	–	–	95	98	94	14	48.9	5
VICTORY V5003RR	–	–	60	77	79	75	20	44.7	5

⑥ Oil content, adjusted to 6.0% moisture content, is expressed as a region-wide average for each herbicide chemistry and maturity group in 2021 only.

– Insufficient or no data available.

Pulses

The following is a list of newer chickpea, faba bean, field pea and lupin varieties and possible new releases for 2023, pending seed supply. The information has been collated from breeding company information and will be updated for the 2023 *Winter crop variety sowing guide*.

For 2023 potential releases, further and more detailed information is available from the respective breeding companies. The *Winter crop variety sowing guide 2022* has more detailed variety descriptions and disease ratings for all released varieties.

Grain yield data and disease ratings shown in the following tables are from GRDC's National Variety Trial (NVT) Program.

Chickpea

Variety	Variety characteristics					Disease resistance ratings				
	Maturity	100 seed weight (g)	Plant height	Lodging resistance	Ascochyta blight	Phytophthora root rot	Botrytis grey mould	Virus		
Desi	Erect plant type with good height to lowest pod, moderate lodging resistance and excellent harvestability, with broad adaptation to all chickpea-growing regions across Australia. It is early-mid flowering (earlier than PBA HatTrick) with early-mid season maturity (earlier than PBA Seamer). Medium-sized desi seed (larger than PBA HatTrick, similar to PBA Seamer) with a yellow-brown seed coat suited to human consumption. Developed by PBA Chickpea program, seed available from commercial partners PB Agrifood, PB Seeds and Woods Seeds.	Early-mid	23	Medium tall	Moderate	MS	S	S	S	-
CBA Captain	Potentially suited to north-western areas where Kyabra has been grown and in paddocks with a low <i>Phytophthora</i> risk. Not recommended for southern NSW. Tall, erect plant type with early-mid season maturity, similar to PBA Seamer. Medium sized seed suited to human consumption. Developed by PBA. Marketed by Seednet.	Early-mid	22	Tall	Very good	VS	VS	S	S	MS
PBA Drummond	High yielding across growing regions of northern NSW, southern and central QLD; recommended and suited to areas north of Dubbo. Semi-erect plant type with mid season maturity. Medium-sized desi seed (larger than PBA HatTrick and PBA Boundary) suited to human consumption. Marketed by Seednet.	Mid	23	Medium	Very good	MS	S	S	S	S
PBA Seamer	High yielding in short season environments in southern and western Australian growing regions. Semi-spreading plant type with earlier flowering and maturity than PBA Slasher. Medium-sized desi seed with tan-brown seed coat suitable for whole and split seed. Marketed by Seednet.	Early	21	Medium short	Moderate	S	No longer tested	S	S	
Kabuli	Semi-spreading plant type similar to Genesis™ 090. Early-mid flowering and maturity (earlier than Genesis™ Kalkee). Large seed size, predominantly 9 mm (larger than Genesis™ Kalkee). Highest yielding large-sized kabuli chickpea, suited to medium rainfall environments of south-eastern Australia. Developed by PBA Chickpea program, seed available from commercial partner PB Seeds.	Early-mid	48	Medium tall	Fair	MS	Not tested	S	S	S
PBA Magnus	Early flowering and early maturing. Medium seed size, 8-9 mm, similar to Almaz. High yielding, medium sized kabuli chickpea. Semi-spreading plant type, which can be prone to lodging. Developed by PBA. Marketed by Seednet.	Early	42	Medium	Fair	MS	-	S	S	S
PBA Monarch	Early to mid flowering; early to mid maturing. Medium seed size, 8 mm, larger than Genesis™ 090 but smaller than Almaz and PBA Monarch. High yielding, medium sized kabuli chickpea in mid to high yield potential environments. Semi-spreading plant type, which can be prone to lodging. Developed by PBA. Marketed by Seednet.	Early-mid	38	Medium	Fair	MS	-	S	S	
PBA Royal										

Ascochyta ratings are for northern Australia (NSW) only, not southern Australia (Vic and SA).

Comparative performance of desi chickpea in northern NSW compared with PBA HatTrick[®] = 100% and southern NSW compared with PBA Slasher[®] = 100%.

North east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA HatTrick (t/ha)	0.98	0.91	—	2.19	2.55	1.66	
CBA Captain	110	114	—	103	108	108	4
Kyabra	114	110	—	102	93	101	4
PBA Boundary	111	106	—	96	101	101	4
PBA Drummond	106	122	—	117	118	116	3
PBA HatTrick	100	100	—	100	100	100	4
PBA Seamer	89	101	—	109	110	106	4

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA HatTrick (t/ha)	0.94	1.03	0.46	2.43	2.96	1.87	
CBA Captain	104	99	120	105	110	107	17
Kyabra	113	104	131	101	100	103	17
PBA Boundary	106	107	110	100	106	105	17
PBA Drummond	95	99	128	113	117	112	13
PBA HatTrick	100	100	100	100	100	100	17
PBA Seamer	90	88	94	105	101	99	17

South west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA Slasher (t/ha)	—	—	—	2.19	2.41	2.30	
CBA Captain	—	—	—	102	98	100	2
Neelam	—	—	—	100	97	98	1
PBA Boundary	—	—	—	87	74	80	2
PBA Maiden	—	—	—	96	99	98	2
PBA Seamer	—	—	—	90	73	81	2
PBA Slasher	—	—	—	100	100	100	2
PBA Striker	—	—	—	102	103	102	2

Comparative performance of kabuli chickpea in northern NSW compared with Almaz[®] = 100%.

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% Almaz (t/ha)	0.71	0.89	0.29	2.63	3.37	1.78	
Almaz	100	100	100	100	100	100	11
Genesis 090	116	115	108	93	103	103	11
Genesis Kalkee	95	108	83	98	100	99	11
PBA Magnus	91	100	69	97	94	95	11
PBA Monarch	99	93	79	94	78	86	11
PBA Royal	95	107	84	99	103	101	11

Faba bean

Variety	Variety characteristics	Disease resistance ratings					
		Maturity	100 seed weight (g)	Seed colour	Ascochyta blight	Chocolate spot	Rust
Northern NSW							
FBA Ayla	Released for northern NSW and southern Queensland. Higher yield than all other faba bean varieties grown in this region. Rust and Bean leaf roll virus resistance are similar to PBA Nanu, but it lacks resistance to chocolate spot and ascochyta blight. It has larger seed than PBA Warda, but smaller than PBA Nasma, placing it in the same category as PBA Nanu. Flowering and maturity time are similar to PBA Nanu, but about a week earlier than Cairo. FBA Ayla is suggested as an alternative to PBA Warda and PBA Nasma, both of which have seed size issues. Licensed to Seednet.	Early	61–68	Beige to brown	–	S	MR
PBA Nasma	Released for northern NSW and southern Queensland with a higher yield, larger and more uniform seed than PBA Warda, making it readily acceptable into the human consumption market. Flowering, maturity time, resistance to chocolate spot and frost tolerance are similar to PBA Warda. It also has improved resistance to Bean leafroll virus over PBA Warda. Rust resistance is slightly inferior to Doza. It is susceptible (S) to Ascochyta. Despite its lower disease resistance, it performed well in southern NSW 2017–2019, due in part to the relatively dry seasons. Licensed to Seednet.	Early	61–79	Beige to brown	S	S	MR–MS
PBA Nanu	It has good overall resistance to disease and is MR to rust and MR to Bean leafroll virus. It has similar agronomic traits to other northern varieties and is S to chocolate spot. PBA Nanu seed is smaller than PBA Nasma but is larger than PBA Warda so more suited to Middle East markets. Licensed to Seednet.	Early	57–61	Beige to brown	–	S	MR
Southern NSW							
PBA Bendoc	The first faba bean variety with tolerance to some imidazolinone herbicides. A minor use permit is currently available for applying imazamox post emergence. PBA Bendoc is adapted to southern NSW, Victoria and SA. It flowers at the same time as Nura and PBA Samira. Seed is a similar size to Nura and suited to the Middle East market. PBA Bendoc is not recommended for northern NSW as it is not adapted to the short growing season and is VS to rust. Very limited data for southern NSW and irrigation. Licensed to Seednet.	Early–mid	50–71	Light brown	MR	S	VS
PBA Marne	It is adapted to the lower rainfall or shorter season environments of southern NSW, Victoria and SA. It is MS (provisional) to Ascochyta. It is more resistant to rust than other southern varieties, and is classified as MR–MS. However, it is S to chocolate spot. PBA Marne has good stem strength and standing ability. Seed is similar in size to PBA Samira and should be suitable to co-mingle with other major varieties for the Middle East market. Commercialised by Seednet.	Early–mid	57–87	Light buff	MS ①	S	MR–MS
PBA Amberley	It is adapted to the medium to high rainfall and longer season environments of southern NSW, Victoria and SA. It is the first faba bean variety rated MR–MS to chocolate spot and is R–MR to ascochyta blight. It has best chocolate spot resistance of all southern varieties. It flowers and matures at about the same time as Nura and PBA Samira. PBA Amberley has excellent stem strength and standing ability. Seed size is similar to PBA Samira and should be suitable to co-mingle with other major varieties for the Middle East market. Licensed to Seednet.	Mid	60–84	Light buff	R–MR	MR–MS	VS

Comparative performance of faba bean in northern NSW compared with PBA Warda^① = 100%

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA Warda (t/ha)	1.89	0.85	—	2.56	3.58	2.59	
Doza	89	77	—	90	93	91	11
FBA Ayla	105	87	—	106	98	102	11
PBA Nanu	94	78	—	95	98	96	11
PBA Nasma	101	83	—	97	89	94	11
PBA Warda	100	100	—	100	100	100	11

North east

Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA Warda (t/ha)	1.25	0.66	—	1.99	2.52	1.61	
Doza	89	92	—	97	86	92	6
FBA Ayla	119	84	—	108	97	106	6
PBA Nanu	102	87	—	103	91	99	6
PBA Nasma	111	91	—	91	95	97	6
PBA Warda	100	100	—	100	100	100	6

Comparative performance of faba bean in southern NSW compared with PBA Samira^① = 100%

South west ⑦							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020 ⑧	2021 ⑧		
% PBA Samira (t/ha)	4.36	4.86	4.21	4.18	4.19	4.36	
Nura	90	98	95	92	102	96	5
PBA Amberley	103	100	102	103	107	103	5
PBA Bendoc	89	105	99	89	98	96	5
PBA Marne	106	102	108	101	120	107	5
PBA Rana	97	84	87	—	91	92	4
PBA Samira	100	100	100	100	100	100	5
PBA Zahra	100	103	104	96	98	100	5

⑦ Please note that the South west trials were irrigated in the MIA 2017–2019.

⑧ Trial moved to a dryland site south of Lockhart from 2020.

Field pea		Variety characteristics					Disease resistance ratings						
Variety	Maturity	100 seed weight (g)	Standing at maturity	Leaf type	Height	Shatter resistance	Bacterial blight (<i>Pseudomonas syringae</i>)	Downy mildew (kaspa strain)	Downy mildew (Parafeld strain)	Powdery mildew	Blackspot	Pea seed-borne mosaic virus	Bean leaf roll virus
Kaspa-type	Kaspa-type variety with improved tolerance to common in-crop and residual Group B imidazolinone herbicides. Similar plant type to PBA Wharton with semi-leafless erect growth habit and distinctive pink-white flowers. Mid flowering (similar to PBA Wharton) and early to mid maturing, suitable for crop-topping. Pod shatter resistance at maturity. Disease resistance similar to PBA Wharton. Produces a medium size, non-dimpled, red-brown coloured seed; marketed as a Kaspa-type grain for human consumption in the Indian/Asian subcontinent. Released by Grains Innovation Australia (GIA) and commercialised by AG Schilling and Co.	4	18	4	Semi leafless	Medium	Resistant	S	S	S	R-MR	MS ①	R
GIA Kastar	Broadly adapted Kaspa-type that performs best in medium to long season climates. Mid-late flowering with early-mid maturity, erect, semi-dwarf, semi-leafless type. Sugarpod trait, resistant to pod shattering at maturity. MS to bacterial blight, similar to PBA Oura; recommended for bacterial-blight-prone regions. Produces a medium size, non-dimpled, tan coloured seed; marketed as a Kaspa-type grain to suit Asian subcontinent human consumption requirements (dhal, flour and roasted snack foods). Released by Pulse Breeding Australia (PBA) and licensed to Seednet.	5	18	4	Semi leafless	Medium	Resistant	MS	S	S	MS	S	S
PBA Butler	A broadly adapted Kaspa-type variety, mid flowering and early to mid maturing, slightly later than PBA Wharton but earlier than Kaspa. Similar plant type as Kaspa with semi-leafless and semi-dwarf plant architecture, non-shattering pods and Kaspa-type seed. Resistance to 2 virus diseases: Pea seed-borne mosaic virus and Bean leaf roll virus. PBA Taylor produces medium sized spherical grain. Seed coat has a uniform tan colour similar to Kaspa and is suitable for dahl and split pea production. Released by PBA and licensed to Seednet.	5	19	4	Semi leafless	Medium	Resistant	S	S	S	MS	R	R
PBA Taylor													

		Variety characteristics						Disease resistance ratings							
Variety		Maturity	100 seed weight (g)	Standing at maturity	Leaf type	Height	Shatter resistance	Bacterial blight (<i>Pseudomonas syringae</i>)	Downy mildew (kaspa strain)	Downy mildew (Parafield strain)	Blackspot	Powdery mildew	Downy mildew (kaspa strain)	Pea seed-borne mosaic virus	Bean leaf roll virus
PBA Wharton	Kaspa-type variety well suited to all field pea production regions of NSW, including central and northern NSW, due to powdery mildew and virus resistance. Similar plant type to Kaspa with semi-leafless erect growth habit and distinctive pink-white flowers. Early-mid flowering (similar to PBA Gurnyah) and early maturing. Sugar pod trait, resistant to pod shattering at maturity. Produces medium size, non-dimpled, tan coloured seed; marketed as a Kaspa-type grain to suit Asian subcontinent human consumption requirements (dhal, flour and roasted snack foods). Released by PBA and licensed to Seednet.	5	18	4	Semi leafless	Medium	Resistant	S	S	S	R-MR	MS	R	R	
GIA Ourstar	Dun-type variety with improved tolerance to common in-crop and residual Group B imidazolinone and sulfonylurea herbicides. Similar plant type to PBA Oura with semi-leafless semi-erect growth habit and purple flowers. Early to mid flowering with a long flowering window; early to mid maturing, suitable for crop-topping. Pod shatter resistance at maturity. Disease resistance similar to PBA Oura. MS [p] to blackspot. Produces a medium size, dimpled, green-tan coloured seed; marketed as Australian dun-type grain for human consumption or stockfeed. Released by GIA and commercialised by AG Schilling and Co.	4	19	4	Semi leafless	Medium	Moderately S ① resistant	S	S	S	MS ①	S	S	-	

① Provisional
Standing: 1–9 (1 = flat on ground, 9 = erect)
Maturity: 1 to 9 (1 = early, 9 = late, <5 best for crop-topping).

R Resistant
MR Moderately resistant
MS Moderately susceptible
S Susceptible

Field pea

Variety	Variety characteristics						Disease resistance ratings					
	Maturity	100 seed weight (g)	Standing at maturity	Leaftype	Height	Shatter resistance	Bacterial blight (<i>Pseudomonas syringae</i>)	Downy mildew (kaspa strain)	Downy mildew (Parafield strain)	Powdery mildew	Blackspot	Bean leaf roll virus
Blue seeded												
PBA Noosa	5	19	4	Semi leafless	Medium	Resistant	S	MS	MS	S	MS	R

PBA Noosa has high yield potential and competes well with other varieties in field pea production zones throughout Australia. Its high early vigour makes it well suited to some of the drier field pea environments. Has performed well in southern NSW National Variety Trials over several years; replacement for Excell variety in this region. Early to mid flowering (similar to PBA Gunyah and PBA Wharton) with early to mid maturity, making it slightly later to finish in longer seasons than these varieties. Sugarpod trait reduces harvest losses due to shattering and semi-dwarf, semi-leafless trait improves standability and harvesting. PBA Noosa will require a strong focus on managing pea weevil and timely harvest to achieve a premium grain product. Comparable disease ratings with most other current varieties, however, it has better performance against downy mildew (MS) and is resistant to *Bean leaf roll virus*. Released by PBA and licensed to PB Seeds.

Standing: 1–9 (1 = flat on ground, 9 = erect)
Maturity: 1 to 9 (1 = early, 9 = late, <5 best for crop-topping).

Comparative performance of field pea in southern NSW compared with PBA Wharton^b = 100%

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA Wharton (t/ha)	1.14	0.98	0.78	2.28	2.06	1.42	
Kaspa-type dun field peas							
GIA Kastar	89	80	78	85	79	83	4
Kaspa	94	76	59	103	106	94	11
PBA Butler	104	81	64	113	117	103	11
PBA Taylor	100	91	74	110	113	103	11
PBA Wharton	100	100	100	100	100	100	11
Dimpled type dun field peas							
GIA Ourstar	70	83	96	72	86	79	4
Morgan	80	82	86	85	100	88	5
PBA Oura	89	89	90	94	106	95	11
PBA Percy	63	88	87	81	98	83	11
White field peas							
PBA Pearl	101	87	88	105	122	105	11
Sturt	80	92	92	89	100	91	11
Blue field peas							
PBA Noosa	108	82	83	105	117	104	8
South west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
% PBA Wharton (t/ha)	1.27	—	0.49	1.99	2.43	1.51	
Kaspa-type dun field peas							
GIA Kastar	97	—	65	83	85	83	5
Kaspa	101	—	75	103	102	99	9
PBA Butler	104	—	86	109	108	106	9
PBA Taylor	104	—	96	110	109	107	9
PBA Wharton	100	—	100	100	100	100	9
Dimpled type dun field peas							
GIA Ourstar	87	—	71	93	90	89	5
Morgan	91	—	77	101	97	96	4
PBA Oura	95	—	88	104	102	101	9
PBA Percy	90	—	87	107	103	102	9
White field peas							
PBA Pearl	97	—	91	111	107	106	9
Sturt	94	—	91	104	102	101	9
Blue field peas							
PBA Noosa	98	—	82	104	101	100	8

Lupin		Variety characteristics						Disease resistance ratings					
Variety		Flowering time	100 seed weight (g)	Lodging resistance	Pod loss, shattering resistance	Brown leaf spot	Pleiochaeta root rot	Phomopsis stem infection	Phomopsis pod infection	Cucumber mosaic virus transmission	Anthracnose resistance		
Narrow-leaf													
PBA Bateman	PBA Bateman offers significant yield improvements over current varieties, particularly in the eastern cropping zones of NSW where virus infection from <i>Cucumber mosaic virus</i> and <i>Bean yellow mosaic virus</i> can cause significant yield loss in susceptible varieties when seasonal conditions are conducive to high aphid numbers. Marketed by Seednet.	Very early	14	Moderately poor	Good	MS	MR	R-MR	MS	MR ①	MR-MS		
Coyote	High and stable yielding, early maturing variety performing well across a very broad range of soil types, rainfall zones and yield potentials. It has performed very well in NSW trials. Where the risk of stem phomopsis is high, monitor livestock when grazing stubbles or remove grazing livestock completely. Coyote's resistance to stem phomopsis is lower than PBA Jurien and Mandelup. Tolerance to metribuzin is equal to Mandelup. Released by Australian Grain Technologies (AGT), seed is available from AGT Affiliates.	Early	14	Moderately good	Good	—	—	S ①	MR-MS	—	MR-MS ①		
NEW Lawler (AGTP0006)	High and stable yield in NSW growing regions, with maturity slightly quicker than Mandelup and quicker than Coyote. Tolerance to metribuzin is similar to PBA Jurien. Good tolerance to pod shattering and reduced risk of seed splitting compared with PBA Jurien. Lawler offers improved resistance to stem phomopsis compared with Coyote, similar to Wonga and PBA Barlock. Released by Australian Grain Technologies (AGT), seed is available from AGT Affiliates.	Very early	14	Moderately good	Good	MS ①	MR ①	MS ①	MR-MS ①	MR	MR-MS ①	MR	
Albus													
Murringo	Early-mid flowering with moderate resistance to pleiochaeta root rot and phomopsis. Murringo is VS to anthracnose. Released by NSW DPI and marketed by Seednet.	Early-mid	32	Good	Good	MR	MR	MS	—	IMMUNE	VS		

① Provisional

Comparative performance of lupin in northern NSW compared with Mandelup[◊] = 100%.

North west							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
Mandelup t/ha	—	—	—	1.75	4.34	2.47	
Coyote	—	—	—	115	—	105	3
Jenabillup	—	—	—	112	92	98	3
Lawler	—	—	—	—	100	102	2
Mandelup	—	—	—	100	100	100	5
PBA Barlock	—	—	—	99	98	98	5
PBA Bateman	—	—	—	113	99	103	4
PBA Gunyidi	—	—	—	112	—	101	3
PBA Jurien	—	—	—	103	—	102	3
Quilinock	—	—	—	105	95	98	5
Wonga	—	—	—	99	90	93	5

Comparative performance of lupin, southern NSW compared with Mandelup[◊] = 100%.

South east							
Variety	Yearly group mean					Regional mean	Number of trials
	2017	2018	2019	2020	2021		
Mandelup t/ha	1.35	—	0.47	2.46	3.09	1.54	
Coyote	94	—	—	138	99	108	9
Jenabillup	103	—	101	133	—	111	10
Lawler	—	—	—	—	100	106	2
Mandelup	100	—	100	100	100	100	10
PBA Barlock	96	—	85	105	101	99	10
PBA Bateman	—	—	113	128	101	109	9
PBA Gunyidi	102	—	112	126	102	109	10
PBA Jurien	91	—	81	114	98	99	10
Quilinock	98	—	88	120	103	104	12
Wonga	105	—	93	103	106	102	12

Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing (September 2022). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Regional New South Wales or the user's independent adviser.