FAR CULTIVAR EVALUATION

FOUNDATION FOR ARABLE RESEARCH

FAR®

spring sown wheat and barley 2025/2026

contents

notes

introduction and welcome

While the 2025-26 season saw challenges for many of our autumn Cultivar Performance Trials (CPT), establishment conditions across the country were more favourable for spring trials.

Irrigated spring wheat trials performed strongly, achieving an average yield of 10.1 t/ha compared with a four-year mean of 9.3 t/ha. The dryland spring wheat trial in the lower North Island achieved 8.6 t/ha, similar to the long-term mean of 8.5 t/ha.

Spring barley yields were more variable. In Canterbury, some individual trial yields were above average, while others were below. Overall, spring barley yields in Canterbury were similar to the four-year mean with 10.4 t/ha compared to 10.2 t/ha. The lower North Island trial achieved 9.1 t/ha, exceeding the four-year mean of 8.6 t/ha. In contrast, Southland trials were lower than the four-year mean with 9.8 t/ha compared with 10.3 t/ha. The spring barley trial at Balfour was not harvested due to poor establishment.

Low disease pressure in disease nurseries resulted in few changes to foliar disease ratings.

Individual trial yields and cultivar disease ratings can be found in the agronomic comments section of this book. For more information on seasonal weather at each trial site, visit FAR's weather platform via the FAR website (www.far.org.nz) and search for the weather station nearest the trial locations.

We thank all the contributors for their support and look forward to a favourable season in 2026-27.

Joanne Drummond
Research Leader - Resilient Cropping Systems

Jacqueline Straathof
CPT Manager

NZ Grown Grains

A certification trademark developed by FAR and industry, with support from EatNZ makes it easy for consumers to identify whether the feeds, foods and beverages they are buying are made from locally grown ingredients.

The NZ Grown Grains trademark may be used, under licence, by end-users to label their products. The aim is to encourage consumers to support local growers who prioritise New Zealand ingredients.

Learn more about NZ Grown Grains and the businesses that are using the trademark at www.nzgrowngrains.nz

wheat - trial site details

2025/2026 trial site location map

CHELTENHAM - MANAWATU

Kiwitea silt loam, Dryland
Trial operator: Kevin Sinclair, New Zealand Institute for Bioeconomy Science
Host farmer: John Ridd

This trial was sown on 17 October 2025 in a surrounding crop of cv. Tribute, following pasture. The trial received 48 kg N/ha in the form of one urea, and one SustaiN® application. During the season the trial received one herbicide, one insecticide and two fungicide applications. The trial was harvested on 23 January 2026.

SHEFFIELD - CENTRAL CANTERBURY

Lyndhurst and Ruapuna silt loam, Irrigated
Trial operator: Russell Kirk, New Zealand Institute for Bioeconomy Science
Host farmer: Tim Wright

This trial was sown into a crop of cv. Discovery on 28 August 2025, following kale. The trial received 196 kg N/ha split across one application of Cropmaster® 15 and two applications of urea. One herbicide, one insecticide, one fungicide and one PGR application were applied during the growing season. The trial was harvested on 7 March 2026.

METHVEN - MID CANTERBURY

Moderately deep silt loam, Irrigated
Trial operator: Ashley Harrison, PGG Wrightson Grain
Host farmer: David Wright

This trial was sown into a crop of cv. Discovery on 15 August 2025, following rape. The trial received 184 kg N/ha split across one application of urea and two applications of N-Protect®. Two herbicides, one insecticide, four fungicides and one PGR application were applied during the growing season. The trial received irrigation. The trial was harvested on 24 February 2026.

SEAFIELD - MID CANTERBURY

Lismore soil, Irrigated
Trial operator: Russell Kirk, New Zealand Institute for Bioeconomy Science
Host farmer: Simon and Harry Bonifant

This trial was sown into a crop of cv. Discovery on 6 August 2025, following a grass and clover mix. Four applications of urea provided 264 kg N/ha. The trial received three herbicides, two insecticides, three fungicides and one PGR application. Irrigation totalling 120 mm was applied over 6 applications. The trial was harvested on 12 March 2026.

Spring Sown Wheat Agronomic Comment 2025/2026 Season

CULTIVAR	End-use	Years in CPT2 trials	Septoria tritici blotch	Stripe rust	Leaf rust	Powdery mildew	Fusarium head blight	Straw strength	Crop height	Maturity	Sprouting susceptibility
Aston	Premium	1	MSS*‡	MS*‡	MSS	R‡	MSS	Moderate	Tall	Intermediate	Low
Cochise	Medium/ feed	6	(MS)‡	MR‡	MSS‡	MR‡	MRMS‡	Stiff	Medium	Early	**Moderate**
Conquest	Premium	23	MS‡	MS‡	S	MS‡	MSS‡	Moderate -stiff	Medium	Early-intermediate	**Low**
Discovery	Medium	13	MSS‡	MRMS‡	MR*	(MR)‡	MSS‡	Stiff	Tall	Intermediate	**Low-moderate**
Kimberley (CRWT278)	Medium	3	MS‡	**(MR)**	MRMS	MRR‡	MS‡	Moderate	Medium	Early-intermediate	Moderate
Raffles	Gristing/ feed	24	MSS	MSS‡	S*‡	MR‡	MSS‡	Moderate	Tall	Intermediate	Low
Reliance	Premium	14	MS	MR	S	MS‡	S‡	Moderate -stiff	Short-medium	Early-intermediate	Low
Sensas	Premium/ medium	16	MS	MRMS*‡	S‡	MR‡	S‡	Stiff	Medium	Early	Low
Viceroy	Medium	16	S	MR‡	S*	MS‡	S‡	Stiff	Medium -tall	Intermediate	**Low**

End-use has been provided by the breeder/agent and does not guarantee that a contract will be issued for that cultivar. Disease susceptibility scores sourced from FAR-funded Disease Nurseries at Lincoln and Palmerston North (assessments carried out by BSI). ‡ Rating based on data from previous seasons and may include CPT1, as disease pressure was low in 2025-26. Scores followed by * indicate resistance is affected by pathotypes present (score is an average). (brackets) indicate there is limited New Zealand trial data to support the current resistance rating (i.e. the cultivar has either been in trials for less than three years and/or disease pressure has been low). Sprouting susceptibility score is an indication of relative susceptibility to preharvest sprouting when conditions are suitable. Data sourced from FAR-funded Sprouting Nurseries (assessments carried out by BSI). Bold text indicates a change in rating.

Key

S = susceptible
MSS = mostly susceptible
MS = moderately susceptible
MRMS = intermediate resistance
MR = moderately resistant
MRR = mostly resistant
R = resistant

Spring Sown Wheat Cultivar Evaluation 2025/2026 Season - yield (t/ha)

CULTIVAR	End-use	Cheltenham	Sheffield	Methven	Seafield	Cant. mean yield	Seasons in FAR trials (Spring sown)
Region		Manawatu	Central Canterbury	Mid Canterbury	Mid Canterbury		
Soil type		Kiwitea silt loam	Lyndhurst and Ruapuna silt loam	Moderately deep silt loam	Lismore soil		
Dryland/Irrigated		Dryland	Irrigated	Irrigated	Irrigated		
Previous crop		Pasture	Kale	Rape	Grass and clover		
Sow date		17 Oct	28 Aug	15 Aug	6 Aug		
Harvest date		23 Jan	7 Mar	24 Feb	12 Mar		
Raffles	Gris	8.3	8.9	8.2	12.1	9.7	24
Cochise	Med	8.8	9.3	9.2	**13.5**	**10.7**	6
Discovery	Med	7.1	9.2	9.3	**13.2**	**10.6**	13
Kimberley (CRWT278)	Med	**9.8**	9.9	**9.8**	**13.2**	**11.0**	3
Viceroy	Med	**9.2**	8.4	8.6	12.2	9.7	16
Sensas	Med/prem	8.4	7.8	9.4	10.6	9.3	16
Aston	Prem	8.1	**10.4**	**9.8**	12.7	**11.0**	1
Conquest	Prem	8.5	7.9	8.5	11.0	9.1	23
Reliance	Prem	9.2	8.6	**9.7**	10.7	9.7	14
Site mean yield (t/ha)		8.6	8.9	9.2	12.1	10.1	
P-value		<0.001	<0.001	<0.001	<0.001	0.010	
LSD (p= 0.05)		0.6	0.4	0.3	0.4	1.1	
CV (%)		4.6	2.8	2.4	2.0	6.3	

Target plant population 200 plants/m^2. Gris - Gristing, Med - Medium, Prem - Premium. End-use has been provided by the agent/breeder and does not guarantee a contract will be issued for that cultivar. Bold text indicates the cultivar was amongst the highest yielding group of cultivars.

Spring Sown Wheat Grain Quality Data 2025/2026 Season

Canterbury

CULTIVAR	End-use	T.G.W. (g)	Test Weight (kg/hl)	Protein (%) (N% x 5.7)	Screenings (%)	Falling No. (seconds)
Raffles	Gris	42	72	12.5	1.6	415
Cochise	Med	45	73	11.7	1.3	258
Discovery	Med	46	73	12.7	1.0	320
Kimberley (CRWT278)	Med	45	72	12.8	1.3	219
Viceroy	Med	37	76	12.6	2.6	316
Sensas	Med/Prem	41	76	13.0	1.4	298
Aston	Prem	37	72	12.7	1.5	355
Conquest	Prem	38	74	13.6	1.4	307
Reliance	Prem	41	74	13.5	1.8	302
Site mean yield		41	73	12.8	1.5	310
P-value		<0.001	<0.001	0.001	0.080	0.001
LSD (p=0.05)		3	2	0.7	NS	66

Averaged over three trials. NS, LSD not calculated as P-value not sigificant.

Southern North Island

CULTIVAR	End-use	T.G.W. (g)	Test Weight (kg/hl)	Protein (%) (N% x 5.7)	Screenings (%)	Falling No. (seconds)
Raffles	Gris	53	78	10.8	0.4	428
Cochise	Med	57	78	10.3	0.4	305
Discovery	Med	52	77	11.3	0.3	355
Kimberley (CRWT278)	Med	54	77	10.8	0.5	294
Viceroy	Med	47	80	11.6	0.5	306
Sensas	Med/Prem	48	82	11.6	0.4	383
Aston	Prem	41	75	10.6	1.0	388
Conquest	Prem	45	79	12.1	0.7	410
Reliance	Prem	47	77	11.8	0.7	409
Site mean yield		49	78	11.2	0.5	364
P-value		-	-	-	-	-
LSD (p=0.05)		-	-	-	-	-

Single trial - no P-value or LSD available.

Gris - Gristing, Med - Medium, Prem - Premium. End-use has been provided by the agent/breeder and does not guarantee a contract will be issued for that cultivar. The quality data for each region is also presented as a 4-year mean on the individual cultivar description pages.

Spring Sown Wheat - 4-year adjusted mean - relative yield by site

CULTIVAR	End-use	Feilding	Sheffield	Methven	Seafield	Canterbury mean yield	Seasons in CPT2 trials (Spring sown)
Region		Manawatu	Central Canterbury	Mid Canterbury	Mid Canterbury		
Dryland/Irrigated		Dryland	Irrigated	Irrigated	Irrigated		
No. of trials		4	4	4	4	16	
Raffles	Gris	98	101	96	104	**101**	24
Cochise	Med	105	101	101	**111**	**105**	6
Discovery	Med	98	97	104	**107**	**103**	13
Kimberley (CRWT278)*	Med	110	109	109	105	**107**	3
Viceroy	Med	97	97	92	98	96	16
Sensas	Med/prem	101	94	96	90	93	16
Aston	Prem	(94)	**(118)**	(108)	(105)	**(110)**	1
Conquest	Prem	96	90	94	92	92	23
Reliance	Prem	100	93	100	88	93	14
Site mean yield (t/ha)		8.5	8.1	8.9	10.8	9.3	
P-value		0.208	0.001	0.428	<0.001	0.003	
LSD (estab. cv.) (p=0.05)		NS	8	NS	6	9	
LSD (new vs estab.) (p=0.05)		NS	12	NS	9	13	

Gris - Gristing, Med - Medium, Prem - Premium. End-use has been provided by the agent/breeder and does not guarantee a contract will be issued for that cultivar. *Kimberley (CRWT278), has only been in CPT2 for three years. LSD (estab. cv.) is for comparing two "established" cultivars (that have both been in all trials). LSD (new vs estab.) is for comparing a "new" (first year) cultivar with an "established" cultivar. NS, LSD not calculated as P-value not significant. Bold text indicates the cultivar was amongst the highest yielding group of cultivars (based on estab. cv. LSD). Figures in brackets are less robust as they are only based on one year of data.

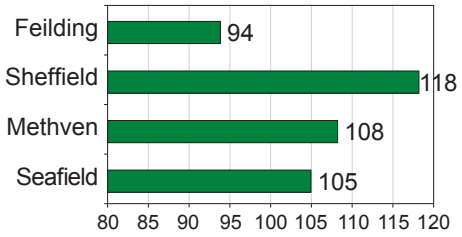
wheat cultivar descriptions

ASTON PVR

YEAR 1

A New Zealand-bred premium milling cultivar that delivers high yields relative to other premium cultivars, except in the southern North Island, where its yield performance is comparable to other premium cultivars. Cv. Aston is resistant to powdery mildew, but shows susceptibility to other common wheat diseases. Tall cultivar with good falling numbers and low sprouting risk.

RELATIVE YIELDS – 1-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Mostly susceptible**
Stripe rust	Moderately susceptible**
Leaf rust	Mostly susceptible
Powdery mildew	Resistant
Fusarium head blight	Mostly susceptible

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Tall
Maturity	Intermediate
Sprouting risk	Low

GRAIN QUALITY (1-year means)	Sth Nth Island	Canterbury
TGW (g)	38	38
Test weight (kg/hl)	74	74
Protein (%) (N% x 5.7)	11.1	12.5
Screenings (%)	1.1	1.3
Falling number (sec)	388	397

END USE	
	Premium grade milling

BACKGROUND	
Breeder	PGG Wrightson Grain
Agent	PGG Wrightson Grain

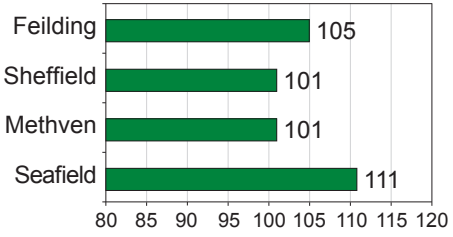
Sth Nth Is (Southern North Island). * First year CPT, so only 1-year means. **Resistance is affected by pathotypes present (score is an average).

COCHISE

YEAR 6

An average to high yielding, medium grade milling and feed variety. Has some degree of resistance to disease, with the exception of STB and leaf rust. A medium height variety with stiff straw and early maturity. Below average falling number.

RELATIVE YIELDS – 4-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Moderately susceptible
Stripe rust	Moderately resistant
Leaf rust	Mostly susceptible
Powdery mildew	Moderately resistant
Fusarium head blight	Intermediate resistance

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Medium
Maturity	Early
Sprouting risk	Moderate

GRAIN QUALITY (4-year means)	Sth Nth Island	Canterbury
TGW (g)	54	47
Test weight (kg/hl)	77	74
Protein (%) (N% x 5.7)	10.8	11.9
Screenings (%)	0.4	1.1
Falling number (sec)	299	295

END USE	
	Medium grade milling, feed

BACKGROUND	
Breeder	KWS, UK
Head licensee	Carrfields Grain & Seed
Agent	Carrfields Grain & Seed

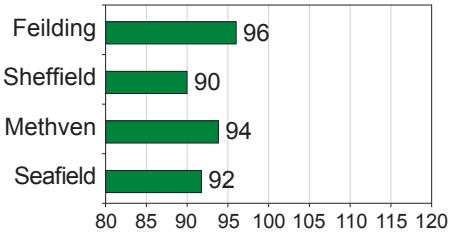
Sth Nth Is (Southern North Island).

CONQUEST PVR

YEAR 23

A high protein content premium milling wheat with average yields compared to the other premium cultivars. Shows varying levels of susceptibility to the common wheat diseases. Early to intermediate maturity with high test weights, high falling numbers and low risk of sprouting.

RELATIVE YIELDS – 4-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Moderately susceptible
Stripe rust	Moderately susceptible
Leaf rust	Susceptible
Powdery mildew	Moderately susceptible
Fusarium head blight	Mostly susceptible

FIELD CHARACTERISTICS	
Straw strength	Moderate-stiff
Crop height	Medium
Maturity	Early-intermediate
Sprouting risk	Low

GRAIN QUALITY (4-year means)	Sth Nth Island	Canterbury
TGW (g)	42	41
Test weight (kg/hl)	77	77
Protein (%) (N% x 5.7)	12.7	13.1
Screenings (%)	0.8	1.2
Falling number (sec)	391	381

END USE	
	Premium grade milling

BACKGROUND	
Breeder	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

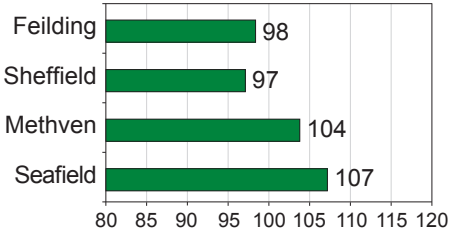
Sth Nth Is (Southern North Island).

DISCOVERY PVR

YEAR 23

Medium grade milling cultivar producing below average to high yields. Mostly susceptible to STB and FHB, but has some degree of resistance to other common wheat diseases. A strong plant growth regulator programme is recommended to reduce both lodging and shattering risk. High grain weights and low to moderate sprout risk.

RELATIVE YIELDS – 4-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Mostly susceptible
Stripe rust	Intermediate resistance
Leaf rust	Moderately resistant*
Powdery mildew	Moderately resistant
Fusarium head blight	Mostly susceptible

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Tall
Maturity	Intermediate
Sprouting risk	Low-moderate

GRAIN QUALITY (4-year means)	Sth Nth Island	Canterbury
TGW (g)	50	47
Test weight (kg/hl)	77	74
Protein (%) (N% x 5.7)	11.7	12.4
Screenings (%)	0.3	0.9
Falling number (sec)	350	346

END USE	
	Medium grade milling

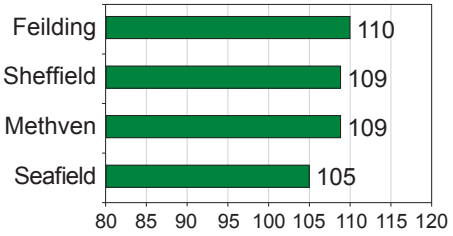
BACKGROUND	
Breeder	Limagrain Europe S.A.
Agent	PGG Wrightson Grain

Sth Nth Is (Southern North Island). *Resistance is affected by pathotypes present (score is an average).

KIMBERLEY (CRWT278) YEAR 3

A New Zealand-bred, high yielding medium grade milling wheat. Moderately susceptible to STB and FHB, but shows resistance to other common cereal diseases. A medium height variety with moderate sprouting risk.

RELATIVE YIELDS – 3-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Moderately susceptible
Stripe rust	Moderately resistant
Leaf rust	Intermediate resistance
Powdery mildew	Mostly resistant
Fusarium head blight	Moderately susceptible

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Early-intermediate
Sprouting risk	Moderate

GRAIN QUALITY (3-year means)	Sth Nth Island	Canterbury
TGW (g)	49	47
Test weight (kg/hl)	76	74
Protein (%) (N% x 5.7)	11.5	12.5
Screenings (%)	0.8	1.1
Falling number (sec)	318	268

END USE	
	Medium grade milling

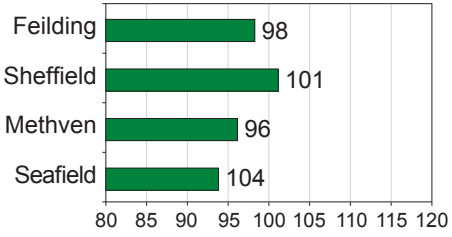
BACKGROUND	
Breeder	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

Sth Nth Is (Southern North Island). *Third year CPT, so only 3-year means.

RAFFLES YEAR 24

A below average to above average yielding feed and gristing wheat. Watch for disease, as cv. Raffles is susceptible to most diseases, with the exception of powdery mildew. Low sprouting risk and a very high falling number. A tall variety with intermediate maturity.

RELATIVE YIELDS – 4-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Mostly susceptible
Stripe rust	Mostly susceptible
Leaf rust	Susceptible**
Powdery mildew	Moderately resistant
Fusarium head blight	Mostly susceptible

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Tall
Maturity	Intermediate
Sprouting risk	Low

GRAIN QUALITY (4-year means)	Sth Nth Island	Canterbury
TGW (g)	49	44
Test weight (kg/hl)	78	74
Protein (%) (N% x 5.7)	11.4	12.3
Screenings (%)	0.3	1.3
Falling number (sec)	416	421

END USE	
	Gristing, feed

BACKGROUND	
Breeder	KWS, UK
Head licensee	Carrfields Grain & Seed
Agent	Carrfields Grain & Seed

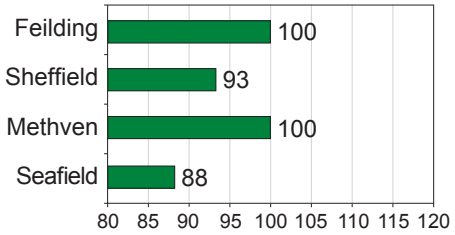
Sth Nth Is (Southern North Island). **Resistance is affected by pathotypes present (score is an average).

RELIANCE PVR

YEAR 14

A New Zealand-bred, premium milling cultivar with average yields compared to the other premium cultivars. Monitor for disease, as cv. Reliance shows susceptibility to most diseases, with the exception of stripe rust. A moderate to stiff strawed cultivar producing high proteins and good falling numbers, with low sprouting risk.

RELATIVE YIELDS – 4-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Moderately susceptible
Stripe rust	Moderately resistant
Leaf rust	Susceptible
Powdery mildew	Moderately susceptible
Fusarium head blight	Susceptible

FIELD CHARACTERISTICS	
Straw strength	Moderate-stiff
Crop height	Short-medium
Maturity	Early-intermediate
Sprouting risk	Low

GRAIN QUALITY (4-year means)	Sth Nth Island	Canterbury
TGW (g)	44	41
Test weight (kg/hl)	76	75
Protein (%) (N% x 5.7)	12.4	13.2
Screenings (%)	0.8	1.7
Falling number (sec)	385	355

END USE	
	Premium milling

BACKGROUND	
Breeder	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

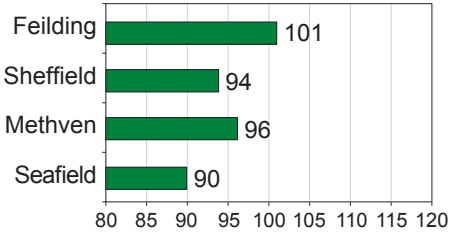
Sth Nth Is (Southern North Island).

SENSAS

YEAR 16

A medium to premium grade milling wheat. Cv. Sensas is the only true spring wheat cultivar in New Zealand. It is well suited to late spring sowings because of its true spring character and early maturity. Should not be planted before July to avoid frost risk at flowering. Has some level of resistance to stripe rust and powdery mildew, but a degree of susceptibility to other common wheat diseases. A stiff strawed cultivar with low sprouting risk.

RELATIVE YIELDS – 4-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Moderately susceptible
Stripe rust	Intermediate resistance*
Leaf rust	Susceptible
Powdery mildew	Moderately resistant
Fusarium head blight	Susceptible

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Medium
Maturity	Early
Sprouting risk	Low

GRAIN QUALITY (4-year means)	Sth Nth Island	Canterbury
TGW (g)	47	43
Test weight (kg/hl)	81	79
Protein (%) (N% x 5.7)	12.2	12.9
Screenings (%)	0.3	1.0
Falling number (sec)	378	354

END USE	
	Medium/premium grade milling

BACKGROUND	
Breeder	RAGT, France
Agent	PGG Wrightson Grain

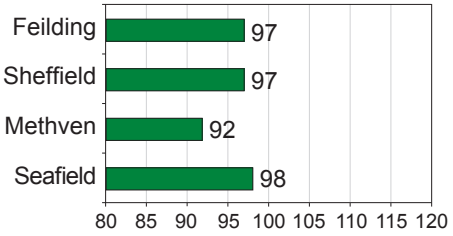
Sth Nth Is (Southern North Island). *Resistance is affected by pathotypes present (score is an average).

VICEROY PVR

YEAR 16

A New Zealand-bred, medium grade milling wheat with below average yields. Monitor for disease, as cv. Viceroy shows susceptibility to the common wheat diseases, with the exception of stripe rust. Good test weight and falling number. This variety has a stiff straw with low sprouting risk.

RELATIVE YIELDS – 3-year adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Septoria tritici blotch	Susceptible
Stripe rust	Moderately resistant
Leaf rust	Susceptible*
Powdery mildew	Moderately susceptible
Fusarium head blight	Susceptible

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Medium-tall
Maturity	Intermediate
Sprouting risk	Low

GRAIN QUALITY (3-year means)	Sth Nth Island	Canterbury
TGW (g)	44	39
Test weight (kg/hl)	80	79
Protein (%) (N% x 5.7)	12.1	12.6
Screenings (%)	0.9	1.9
Falling number (sec)	353	354

END USE	
	Medium grade milling

BACKGROUND	
Breeder	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

Sth Nth Is (Southern North Island). *Resistance is affected by pathotypes present (score is an average).

2025/2026 trial site location map

BALFOUR – NORTHERN SOUTHLAND

Wendonside silt loam, Dryland
Trial operator: Chetan Parab,
New Zealand Institute for Bioeconomy Science
Host farmer: Sean Wilkins

This dryland trial was not harvested because of low and uneven crop establishment, which compromised the trial.

CHATTON – CENTRAL SOUTHLAND

Clay loam, Dryland
Trial operator: Chetan Parab,
New Zealand Institute for Bioeconomy Science
Host farmer: John and Jono Gardyne

This dryland trial was sown on 6 November 2025 into a field of cv. SY Silhouette following wheat and greenfeed oats. The trial received 216 kg N/ha divided over three applications. The trial received two herbicide, three insecticide, three fungicide and two PGR applications. Lodging was recorded but the crop was harvested successfully on 9 April 2026.

DUNSANDEL - CENTRAL CANTERBURY

Mayfield moderately deep silt, Irrigated
Trial operator: Ashley Harrison,
PGG Wrightson Grain
Host farmer: Will Chambers

The trial was sown on 26 August 2025 in a paddock of cv. SY Transformer following ryegrass. A total of 67 kg N/ha was applied in one fertiliser application with an additional ≈125 kg /ha applied in the form of liquid urea and one other liquid fertiliser. Two herbicides, two insecticides, two fungicides and two PGRs were applied during the growing season. The trial received irrigation and was harvested on 2 February 2026.

MARTON - MANAWATU

Kiwitea loam, Dryland
Trial operator: Kevin Sinclair,
New Zealand Institute for Bioeconomy Science
Host farmer: Brentin Knox

This dryland trial was sown on 12 November 2025 in a paddock of cv. 14007-026 following forage brassica. Background soil N was 25 kg N/ha, with the trial receiving a further 37 kg N/ha via one application of Nrich SOA and one of YaraMila® Actyva. One herbicide and two fungicide applications were applied during the growing season. Minor lodging was recorded but the crop was harvested successfully on 26 February 2026.

METHVEN - MID CANTERBURY

Lyndhurst silt loam, Irrigated
Trial operator: Matt Hicks,
Cropmark Seeds Ltd
Host farmer: Brendon Moore

The trial was sown on 23 August 2025 in a paddock of cv. SY Dolomite following plantain. The trial received 191 kg N/ha. The trial received two herbicide, two insecticide, three fungicide and two PGR applications during the growing season. The trial received 80 mm irrigation and was harvested on 23 February 2026.

PENDARVES - MID CANTERBURY

Wakanui deep silt loam, Irrigated
Trial operator: Russell Kirk,
New Zealand Institute for Bioeconomy Science
Host farmer: Eric Watson

The trial was sown on 14 October 2025 in a paddock of cv. Irina following wheat. It received a total of 87 kg N/ha of urea in two applications. Three herbicides, four insecticides, one PGR and two fungicide applications were applied during the growing season. The trial was harvested on 12 March 2026.

ST ANDREWS – SOUTH CANTERBURY

Claremont silt loam, Dryland
Trial operator: Matt Hicks,
Cropmark Seeds Ltd
Host farmer: Shaun Miller

This dryland trial was sown on 16 September 2025 following oats. The trial was harvested on 5 March 2026. Further management data has not been received.

WHANGANUI - MANAWATU

Marton clay loam, Dryland
Trial operator: Kevin Sinclair,
New Zealand Institute for Bioeconomy Science
Host farmer: James Campbell

This dryland trial was sown on 5 November 2025 into a field of cv. SY Transformer following barley. 51 N kg/ha was applied in the form of Ammonium Sulphate and YaraMila® Actyva S. The trial received one pre-emergence herbicide and one fungicide. Lodging was recorded in some plots, but the crop was harvested successfully on 5 March 2026.

Spring Sown Barley Agronomic Comment 2025/2026 Season

CULTIVAR	End-use	Years in CPT2 trials	Scald	Net blotch (net form)	Leaf rust	Powdery mildew	Straw strength	Crop height	Maturity
Amplify (CRBA180)	Feed	3	(MRMS)‡	MRMS‡	S	Unknown	Moderate	Medium	Intermediate
Baxter	Feed	4	MRMS	MRMS‡	S	MR‡	Moderate	Medium	Early-int
Belter (KSB2419)	Feed/Malting potential	1	**(MR)**	(MR)	**(MS*)**	Unknown	Moderate	Medium	Intermediate
Buttress	Feed	11	MSS‡	MR	MS	MRR‡	Moderate	Medium-tall	Intermediate
Laureate	Malting/feed	10	MRMS	MR	MS	MRR‡	Moderate	Medium	Intermediate
Milford	Feed	13	MS	MS	MS*	MS*‡	Stiff	Short	Intermediate
RGT Planet	Malting/feed	12	MS‡	MS‡	MS‡	MRR‡	Moderate	Medium	Early-intermediate
SY Dolomite	Feed	8	MRMS‡	MRMS	MSS‡	R‡	Moderate-stiff	Medium	Intermediate
SY Silhouette	Feed	9	MRMS‡	MR	(MS)‡	R‡	Stiff	Medium	Late
SY Solar	Malting/feed	6	S*	MRMS	S	R‡	Stiff	Medium	Early-int
SY Transformer	Malting/feed	7	MRMS	MR	S‡	R‡	Moderate-stiff	Medium	Intermediate
Thunder (KSB2418)	Feed/Malting potential	1	**(MRMS)**	(MRMS)‡	(S)	Unknown	Moderate	Medium	Intermediate
SY418-336	Feed	4	S	MRMS‡	**(MSS)**	Unknown	Stiff	Short-medium	Intermediate
SY421-164	Feed/Malting potential	1	**(MRR)**	(MR)	**(MS)**	Unknown	Moderate	Medium	Intermediate

End-use has been provided by the breeder/agent and does not guarantee that a contract will be issued for that cultivar. Disease susceptibility scores sourced from FAR-funded Disease Nurseries at Lincoln and Palmerston North (assessments carried out by BSI). ‡Rating based on data from previous seasons and may include CPT1, as disease pressure was low in 2025-26. Scores followed by * indicate resistance is affected by pathotypes present (score is an average). (brackets) indicate there is limited New Zealand trial data to support the current resistance rating (i.e. the cultivar has either been in trials for less than three years and/or disease pressure has been low). Bold text indicates a change in rating.

Key

S = susceptible
MSS = mostly susceptible
MS = moderately susceptible
MRMS = intermediate resistance
MR = moderately resistant
MRR = mostly resistant
R = resistant

barley - 2025/2026 yield (t/ha)

Spring Sown Barley Cultivar Evaluation 2025/2026 Season - yield (t/ha)

CULTIVAR	Whanganui	Marton	Southern NI mean	Dunsandel	Methven	
Region	Manawatu	Manawatu		Central Canterbury	Mid Canterbury	
Soil Type	Marton clay loam	Kiwitea loam		Mayfield moderately deep silt	Lyndhurst silt loam	
Dryland/Irrigated	Dryland	Dryland		Irrigated	Irrigated	
Previous crop	Barley	Forage brassica		Ryegrass	Plantain	
Sowing date	5 Nov	12 Nov		26 Aug	23 Aug	
Harvest date	5 Mar	26 Feb		27 Feb	23 Feb	
Amplify (CRBA180)	**8.4**	**10.4**	**9.4**	**12.3**	**11.1**	
Baxter	**8.6**	9.5	9.1	**11.9**	**11.4**	
Belter (KSB2419) [MP]	**8.9**	**10.4**	**9.6**	**12.0**	10.9	
Buttress	8.3	9.9	9.1	11.3	10.0	
Laureate [M]	**8.5**	9.9	**9.2**	**12.0**	10.5	
Milford	7.7	9.3	8.5	10.1	8.8	
RGT Planet [M]	7.5	8.8	8.1	10.4	9.8	
SY Dolomite	**8.9**	**10.3**	**9.6**	11.8	10.4	
SY Silhouette	**8.6**	9.8	**9.2**	11.7	10.4	
SY Solar [M]	7.8	9.2	8.5	10.8	9.9	
SY Transformer [M]	**8.7**	9.7	9.2	11.4	10.7	
Thunder (KSB2418) [MP]	**8.5**	**10.2**	**9.3**	11.6	11.1	
SY418-336	**8.7**	10.0	**9.3**	**11.9**	10.6	
SY421-164 [MP]	**8.5**	**10.3**	**9.4**	11.6	10.7	
Site mean yield (t/ha)	8.4	9.8	9.1	11.5	10.5	
P-Value	<0.001	<0.001	<0.001	<0.001	<0.001	
LSD (p=0.05)	0.6	0.4	0.4	0.4	0.3	
CV (%)	4.6	2.6	2.3	2.5	2.1	

Target plant population 250 plants/m^2. *Abandoned: Balfour - establishment. [M] Malting, [MP] Malting potential. End-use has been provided by the breeder/agent and does not guarantee that a contract will be issued for that cultivar. Bold text indicates the cultivar was amongst the highest yielding group of cultivars.

	Pendarves	St Andrews	Canterbury mean	Balfour	Chatton	Southland mean	Seasons in CPT2 trials (Spring sown)
	Mid Canterbury	South Canterbury		Northern Southland	Central Southland		
	Wakanui deep silt loam	Claremont silt loam,			Clay loam		
	Irrigated	Dryland			Dryland		
	Wheat	Oats			Wheat and greenfeed oats		
	14 Oct	16 Sep			6 Nov		
	12 Mar	5 Mar			9 Apr		
	12.1	**8.3**	**11.0**		**10.6**	**10.6**	3
	11.9	**8.1**	**10.8**		**10.1**	**10.1**	4
	11.2	**8.6**	**10.7**		**10.3**	**10.3**	1
	11.7	**8.1**	10.3		**10.6**	**10.6**	11
	11.7	**8.1**	**10.6**		9.9	9.9	10
	10.9	7.2	9.2		9.3	9.3	13
	11.3	6.9	9.6		8.5	8.5	11
	11.1	**8.3**	10.4		10.0	10.0	8
	11.3	**8.4**	10.5		**10.2**	**10.2**	8
	11.6	7.2	9.9		9.4	9.4	6
	11.5	**8.2**	10.4		9.5	9.5	7
	11.4	**8.2**	**10.6**		10.0	10.0	1
	12.0	**8.2**	**10.7**		**10.2**	**10.2**	4
	11.9	**8.2**	**10.6**		8.6	8.6	1
	11.5	8.0	10.4		**9.8**	**9.8**	
	0.001	<0.001	<0.001		<0.001	<0.001	
	0.5	0.7	0.5		0.6	0.6	
	3.3	5.8	3.2		4.2	4.2	

Spring Sown Barley Grain Quality Data 2025/2026 Season

Southern North Island

CULTIVAR	T.G.W. (g)	Test Weight (kg/hl)	Protein (%) (N% x 6.25)	Screenings (%)
Amplify (CRBA180)	64	62	10.5	0.7
Baxter	63	61	9.8	0.7
Belter (KSB2419) MP	65	61	9.7	0.7
Buttress	57	65	10.4	0.8
Laureate M	62	61	10.5	0.7
Milford	57	64	11.0	0.7
RGT Planet M	60	64	11.0	1.0
SY Dolomite	64	61	10.4	0.9
SY Silhouette	61	61	9.9	0.7
SY Solar M	63	64	10.6	0.8
SY Transformer M	62	63	10.3	0.6
Thunder (KSB2418) MP	61	62	10.3	0.7
SY418-336	62	61	9.5	0.5
SY421-164 MP	61	62	9.6	0.6
Mean	62	62	10.2	0.7
P-value	<0.001	0.001	0.001	0.548
LSD (p=0.05)	2	2	0.6	NS

Mean of two trials. NS, LSD not calculated as P-value not significant.

Canterbury

CULTIVAR	T.G.W. (g)	Test Weight (kg/hl)	Protein (%) (N% x 6.25)	Screenings (%)
Amplify (CRBA180)	56	59	11.4	2.5
Baxter	54	60	10.9	3.9
Belter (KSB2419) MP	56	60	11.3	2.6
Buttress	51	63	11.4	1.8
Laureatet M	54	60	10.7	3.0
Milford	49	58	11.6	5.7
RGT Planett M	52	61	11.5	3.3
SY Dolomite	53	57	10.9	4.1
SY Silhouette	53	57	10.4	3.1
SY Solar M	54	60	11.1	3.1
SY Transformert M	55	59	10.9	2.6
Thunder (KSB2418) MP	54	59	11.2	2.2
SY418-336	53	60	10.8	3.0
SY421-164 MP	53	60	10.6	3.0
Mean	53	59	11.0	3.1
P-value	<0.001	<0.001	0.022	0.003
LSD (p=0.05)	2	2	0.7	1.5

Mean of four trials.

M Malting, MP Malting potential. End-use has been provided by the breeder/agent and does not guarantee that a contract will be issued for that cultivar.

Southland

CULTIVAR	T.G.W. (g)	Test Weight (kg/hl)	Protein (%) (N% x 6.25)	Screenings (%)
Amplify (CRBA180)	54	61	12.9	4.6
Baxter	55	60	12.5	4.4
Belter (KSB2419) MP	55	60	12.4	3.8
Buttress	52	66	12.5	1.9
Laureate M	55	59	12.6	3.5
Milford	49	61	13.2	6.4
RGT Planet M	50	60	12.3	5.3
SY Dolomite	53	59	11.8	4.5
SY Silhouette	53	59	12.1	4.4
SY Solar M	54	62	12.5	3.0
SY Transformer M	54	61	11.9	3.4
Thunder (KSB2418) MP	54	62	12.2	4.1
SY418-336	57	62	12.1	2.7
SY421-164 MP	53	59	11.8	3.8
Mean	54	61	12.3	4.0
P-value	-	-	-	-
LSD (p=0.05)	-	-	-	-

Single trial - no P-value or LSD available.

M Malting, MP Malting potential. End-use has been provided by the breeder/agent and does not guarantee that a contract will be issued for that cultivar. The quality data for each region is also presented as a 4-year mean on the individual cultivar description pages.

barley - 4-year adjusted mean

Spring Sown Barley - 4-year adjusted mean - relative yield by site

CULTIVAR	Whanganui	Marton	Southern NI mean	Dunsandel	Methven	
Region	Manawatu	Manawatu		Central Canterbury	Mid Canterbury	
Dryland/Irrigated	Dryland	Dryland		Irrigated	Irrigated	
No. of trials	4	3	7	4	3	
Amplify (CRBA180)	**103**	**104**	**103**	**103**	**107**	
Baxter	**104**	98	101	**104**	**105**	
Belter (KSB2419) MP	**(106)**	**(106)**	**(106)**	**(104)**	**(104)**	
Buttress	100	99	99	97	97	
Laureate M	100	100	100	**103**	**101**	
Milford	94	97	96	89	88	
RGT Planet M	91	89	90	91	94	
SY Dolomite	**103**	**103**	**103**	**103**	100	
SY Silhouette	101	99	100	**102**	100	
SY Solar M	95	94	94	96	95	
SY Transformer M	99	100	100	100	**101**	
Thunder (KSB2418) MP	**(101)**	**(103)**	(102)	**(101)**	**(105)**	
SY418-336	**102**	102	102	**103**	**101**	
SY421-164 MP	**(101)**	**(105)**	**(103)**	**(101)**	**(102)**	
Site mean yield (t/ha)	8.0	9.2	8.6	11.1	10.9	
P-value	<0.001	<0.001	<0.001	<0.001	<0.001	
LSD (estab. cv.) (p=0.05)	5	3	3	4	6	
LSD (new vs estab.) (p=0.05)	8	5	5	6	9	

*No results for Marton (2022-23) and Methven (2023-24), Balfour (2025-26) so data are 3-year means. No result from Chatton (2022-23, 2023-24) so data are 2-year means.

- Cultivar has not been in trials at this location.

LSD (estab. cv.) is for comparing two “established” cultivars (that have both been in all trials).

LSD (new vs estab. cv.) is for comparing a “new” (first year) cultivar with an “established” cultivar.

	Pendarves	St Andrews	Canterbury mean	Balfour	Chatton	Southland mean	Seasons in CPT2 trials
	Mid Canterbury	South Canterbury		Northern Southland	Central Southland		(Spring sown)
	Irrigated	Dryland		Dryland	Dryland		
	4	4	14	3	2	6	
	104	**105**	**105**	107	**107**	**108**	3
	101	101	**103**	106	**102**	**105**	4
	(96)	**(108)**	**(103)**	-	**(105)**	**(105)**	1
	103	97	98	103	**105**	**105**	11
	102	100	**102**	96	98	98	10
	98	93	92	89	93	92	13
	94	86	92	102	90	96	11
	97	**102**	**101**	102	**102**	**102**	8
	101	**106**	**102**	102	**104**	**104**	8
	98	89	95	94	97	96	6
	101	**103**	**101**	101	**102**	**102**	7
	(99)	**(103)**	**(102)**	-	**(102)**	**(101)**	1
	104	**106**	**103**	98	**105**	**102**	4
	(103)	**(102)**	**(102)**	-	(88)	(86)	1
	10.4	8.3	10.2	8.3	10.3	9.3	
	<0.001	<0.001	<0.001	0.258	0.005	0.039	
	6	6	5	NS	7	9	
	9	9	7	NS	8	12	

NS, LSD not calculated as P-value not significant.

Bold text indicates the cultivar was amongst the highest yielding group of cultivars (based on estab. cv. LSD).

Figures in brackets are less robust as they are only based on one year of data.

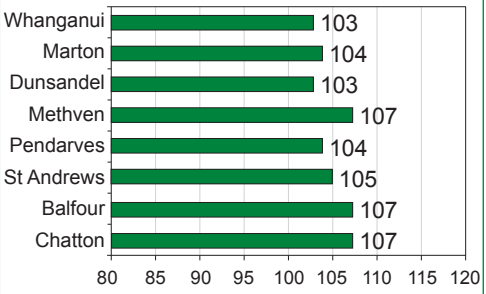
barley cultivar descriptions

AMPLIFY (CRBA180) Provisional PVR

YEAR 3

An above average to high yielding feed cultivar. Intermediate resistance to scald and net blotch, but susceptibility to leaf rust. A medium height cultivar with moderate straw strength and intermediate maturity.

RELATIVE YIELDS – 3-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Intermediate resistance
Leaf rust	Susceptible
Powdery mildew	Unknown

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (3-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	60	57	57
Test weight (kg/hl)	62	62	62
Protein (%) (N% x 6.25)	10.7	11.2	13.3
Screenings (%)	1.1	2.2	3.8

END USE	
	Feed

BACKGROUND	
Breeder	Sejet
Head licensee	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

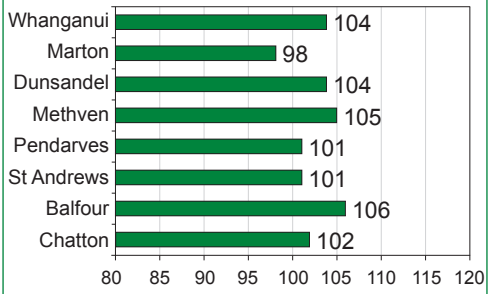
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * Third year in CPT2, so 3-year mean, 2-year mean for Balfour (no data 2025-26) and Chatton (no data from 2023-24).

BAXTER PVR

YEAR 4

A mostly average to high yielding feed cultivar. Has some resistance to scald, net blotch and powdery mildew, but shows susceptibility to leaf rust. A medium height cultivar with moderate straw strength and early to intermediate maturity.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Intermediate resistance
Leaf rust	Susceptible
Powdery mildew	Moderately resistant

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Early-intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	58	55	56
Test weight (kg/hl)	61	61	61
Protein (%) (N% x 6.25)	10.1	10.7	12.2
Screenings (%)	1.4	3.1	4.0

END USE	
	Feed

BACKGROUND	
Breeder	Sejet
Head licensee	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

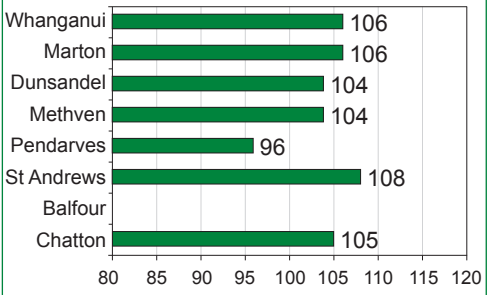
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

BELTER (KSB2419)

YEAR 1

A generally above average to high yielding feed cultivar with malting potential. Moderately resistant to scald and net blotch, but is moderately susceptible to leaf rust. A medium height cultivar with moderate straw strength and intermediate maturity.

RELATIVE YIELDS – 1-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Moderately resistant
Net form of net blotch	Moderately resistant
Leaf rust	Moderately susceptible**
Powdery mildew	Unknown

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (1-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	61	58	56
Test weight (kg/hl)	62	62	62
Protein (%) (N% x 6.25)	9.9	11.3	12.8
Screenings (%)	1.4	2.2	3.9

END USE	Feed/malting potential

BACKGROUND	
Breeder	Secobra Research
Head Licensee	PGG Wrightson Grain
Agent	PGG Wrightson Grain

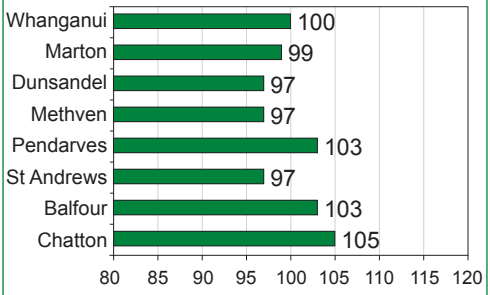
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). *First year in CPT2, so 1-year mean for all sites except Balfour (no data). ** Resistance is affected by pathotypes present (score is an average).

BUTTRESS PVR

YEAR 11

A feed variety with below average to above average yields depending on location. Has some resistance to net blotch and powdery mildew, but shows susceptibility to other common barley diseases. A medium to tall cultivar with moderate straw strength and intermediate maturity.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Mostly susceptible
Net form of net blotch	Moderately resistant
Leaf rust	Moderately susceptible
Powdery mildew	Mostly resistant

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium-tall
Maturity	Intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	54	52	53
Test weight (kg/hl)	66	65	66
Protein (%) (N% x 6.25)	10.9	11.6	13.2
Screenings (%)	1.6	1.8	2.8

END USE	Feed

BACKGROUND	
Breeder	Sejet
Head licensee	New Zealand Institute for Bioeconomy Science
Agent	Luisetti Seeds

Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

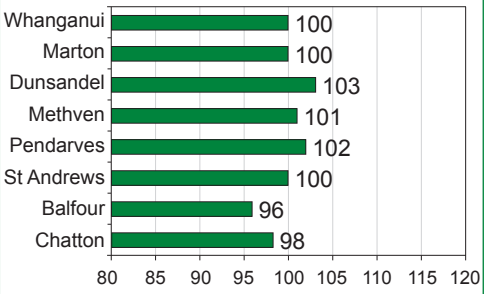
barley cultivar descriptions

LAUREATE PVR

YEAR 10

A variable yielding feed and malting variety. Moderately susceptible to leaf rust, but shows resistance to other common barley diseases. Medium height cultivar with a moderate straw strength that requires a robust plant growth regulator programme to capitalise on yield potential.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Moderately resistant
Leaf rust	Moderately susceptible
Powdery mildew	Mostly resistant

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	58	55	54
Test weight (kg/hl)	62	62	63
Protein (%) (N% x 6.25)	10.7	11.2	12.9
Screenings (%)	1.1	2.6	3.1

END USE	
	Malting, feed

BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	Cropmark Seeds
Agent	PGG Wrightson Grain

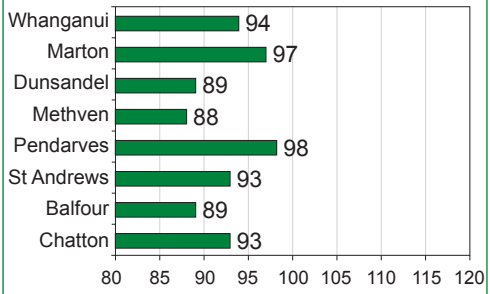
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

MILFORD

YEAR 13

A feed cultivar with below average yields. Moderately susceptible to all common barley diseases. A short, stiff strawed variety with intermediate maturity and high screenings percentage.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Moderately susceptible
Net form of net blotch	Moderately susceptible
Leaf rust	Moderately susceptible**
Powdery mildew	Moderately susceptible**

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Short
Maturity	Intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	55	51	50
Test weight (kg/hl)	65	62	63
Protein (%) (N% x 6.25)	10.9	11.4	12.6
Screenings (%)	1.7	4.9	7.3

END USE	
	Feed

BACKGROUND	
Breeder	Breun, Germany
Head Licensee	Carrfields Grain & Seed
Agent	Carrfields Grain & Seed

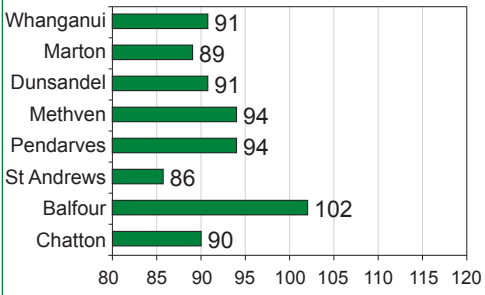
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2 year means for Chatton (no data from 2022-23 and 2023-24). ** Resistance is affected by pathotypes present (score is an average).

RGT PLANET PVR

YEAR 12

A malting and feed cultivar producing mostly below average yields. Mostly resistant to powdery mildew, but moderately susceptible to all other common barley diseases. Medium height with moderate straw strength.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Moderately susceptible
Net form of net blotch	Moderately susceptible
Leaf rust	Moderately susceptible
Powdery mildew	Mostly resistant

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Early-intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	57	54	54
Test weight (kg/hl)	63	63	64
Protein (%) (N% x 6.25)	10.8	11.4	12.8
Screenings (%)	1.8	3.1	4.4

END USE	
	Malting, feed

BACKGROUND	
Breeder	RAGT R2n
Title holder	RAGT
Head licensee	RAGT New Zealand
Agent	PGG Wrightson Grain

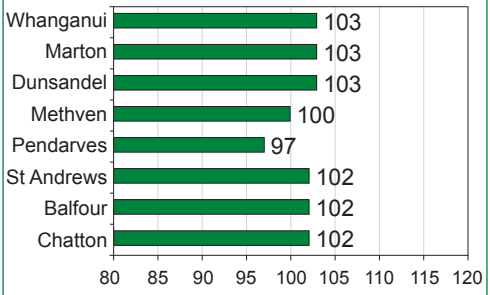
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

SY DOLOMITE PVR

YEAR 8

Average to above average yielding feed variety. Has varying levels of resistance to most common barley diseases, but is mostly susceptible to leaf rust. A medium height variety with moderate to stiff straw strength.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Intermediate resistance
Leaf rust	Mostly susceptible
Powdery mildew	Resistant

FIELD CHARACTERISTICS	
Straw strength	Moderate-stiff
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	60	56	55
Test weight (kg/hl)	63	61	62
Protein (%) (N% x 6.25)	10.6	11.1	12.6
Screenings (%)	1.3	3.1	3.6

END USE	
	Feed

BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	Cropmark Seeds
Agent	Wholesale Seeds

Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

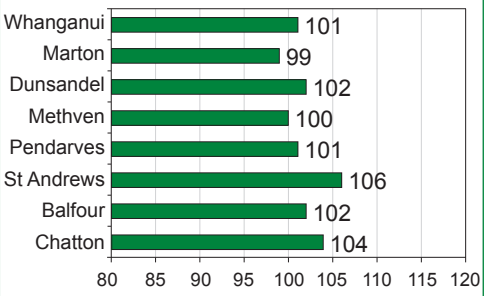
barley cultivar descriptions

SY SILHOUETTE PVR

YEAR 9

Mostly average to above average yielding feed variety. Moderately susceptible to leaf rust, but shows varying levels of resistance to other common barley diseases. A late maturing, medium height variety with a stiff straw.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Moderately resistant
Leaf rust	Moderately susceptible
Powdery mildew	Resistant

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Medium
Maturity	Late

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	57	55	55
Test weight (kg/hl)	62	61	61
Protein (%) (N% x 6.25)	10.2	10.9	12.6
Screenings (%)	1.9	2.7	4.2

END USE	
	Feed

BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	Cropmark Seeds
Agent	Advance Agriculture, Cates

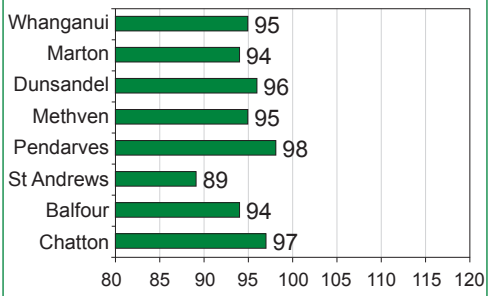
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

SY SOLAR

YEAR 6

A below average yielding feed and milling variety. Susceptible to scald and leaf rust, but shows varying levels of resistance to net blotch and powdery mildew. A medium height cultivar with a stiff straw and early to intermediate maturity.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Susceptible**
Net form of net blotch	Intermediate resistance
Leaf rust	Susceptible
Powdery mildew	Resistant

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Medium
Maturity	Early-intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	59	56	55
Test weight (kg/hl)	64	62	62
Protein (%) (N% x 6.25)	10.8	11.0	12.8
Screenings (%)	1.3	2.7	4.6

END USE	
	Malting, feed

BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	Cropmark Seeds
Agent	H&T Agronomics

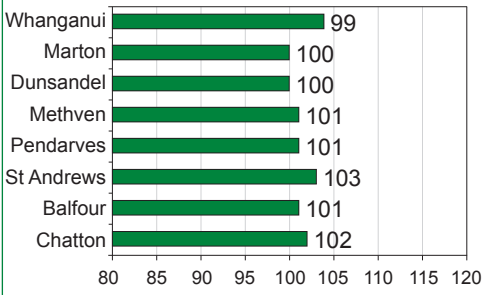
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24). ** Resistance is affected by pathotypes present (score is an average).

SY TRANSFORMER PVR

YEAR 7

Average to slightly above average yielding feed and malting variety. Has varying levels of resistance to the most common diseases, but is susceptible to leaf rust. Medium height with moderate to stiff straw strength and intermediate maturity.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Moderately resistant
Leaf rust	Susceptible
Powdery mildew	Resistant

FIELD CHARACTERISTICS	
Straw strength	Moderate-stiff
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	59	56	55
Test weight (kg/hl)	64	62	62
Protein (%) (N% x 6.25)	10.5	11.0	12.8
Screenings (%)	1.1	2.5	3.5

END USE	Malting, feed

BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	Cropmark Seeds
Agent	PGG Wrightson Grain

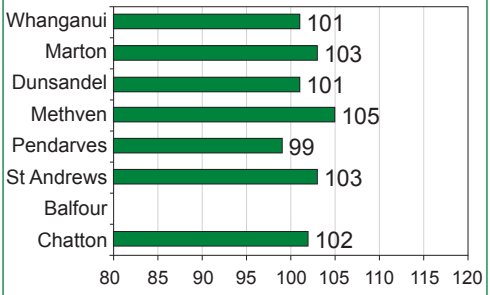
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

THUNDER (KSB2418)

YEAR 1

An average to above average yielding feed cultivar with malting potential. Intermediate resistance to scald and net blotch, but is susceptible to leaf rust. A medium height cultivar with moderate straw strength and intermediate maturity.

RELATIVE YIELDS – 1-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Intermediate resistance
Net form of net blotch	Intermediate resistance
Leaf rust	Susceptible
Powdery mildew	Unknown

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (1-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	58	56	55
Test weight (kg/hl)	63	61	64
Protein (%) (N% x 6.25)	10.5	11.3	12.6
Screenings (%)	1.4	1.8	4.1

END USE	Feed/malting potential

BACKGROUND	
Breeder	Secobra Research
Head Licensee	PGG Wrightson Grain
Agent	PGG Wrightson Grain

Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). *First year in CPT2, so 1-year mean for all sites except Balfour (no data).

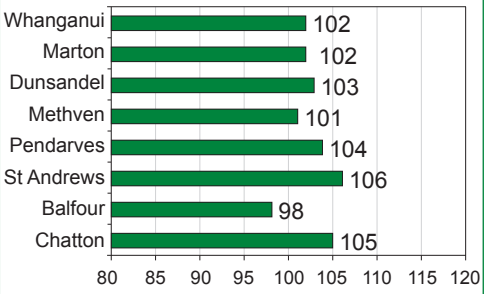
barley cultivar descriptions

SYN418-336

YEAR 4

A feed variety with mostly average to above average yields. Has intermediate resistance to net blotch, but shows susceptibility to scald and leaf rust. A short to medium height cultivar with stiff straw strength and intermediate maturity.

RELATIVE YIELDS – 4-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Susceptible
Net form of net blotch	Intermediate resistance
Leaf rust	Mostly susceptible
Powdery mildew	Unknown

FIELD CHARACTERISTICS	
Straw strength	Stiff
Crop height	Short-medium
Maturity	Intermediate

GRAIN QUALITY (4-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	58	56	56
Test weight (kg/hl)	62	62	62
Protein (%) (N% x 6.25)	10.3	10.9	12.9
Screenings (%)	1.0	2.7	3.3

END USE	
	Feed

BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	RAGT New Zealand
Agent	Not yet assigned

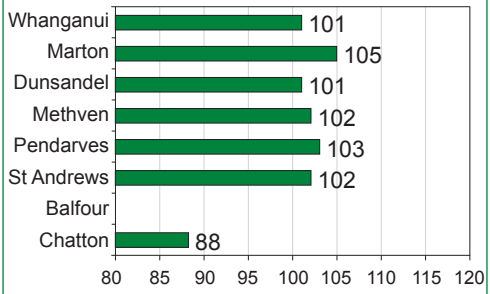
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). * 3-year mean for Marton (no data 2022-23) and Balfour (no data 2025-26), 2-year mean for Chatton (no data from 2022-23 and 2023-24).

SY421-164

YEAR 1

Generally an average to above average high yielding feed cultivar with malting potential. Shows resistance to scald and net blotch, but is moderately susceptible to leaf rust. A medium height cultivar with moderate straw strength and intermediate maturity.

RELATIVE YIELDS – 1-year* adjusted mean (% of site mean yield)



DISEASE RESISTANCE	
Scald	Mostly resistant
Net form of net blotch	Moderately resistant
Leaf rust	Moderately susceptible
Powdery mildew	Unknown

FIELD CHARACTERISTICS	
Straw strength	Moderate
Crop height	Medium
Maturity	Intermediate

GRAIN QUALITY (1-year means)	Sth Nth Is	Cant	Sthld
TGW (g)	58	55	54
Test weight (kg/hl)	62	62	61
Protein (%) (N% x 6.25)	9.8	10.6	12.2
Screenings (%)	1.3	2.6	3.8

END USE	
	Feed/malting potential

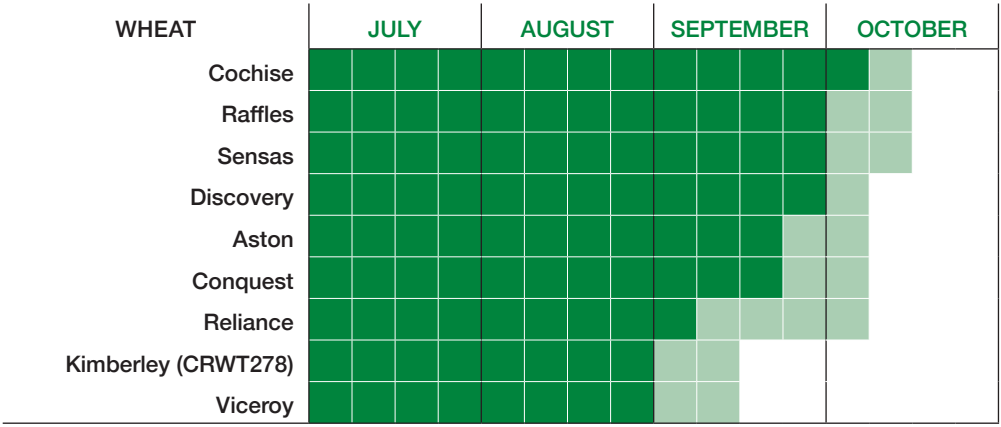
BACKGROUND	
Breeder	Syngenta
Title holder	RAGT
Head licensee	RAGT New Zealand
Agent	Not yet assigned

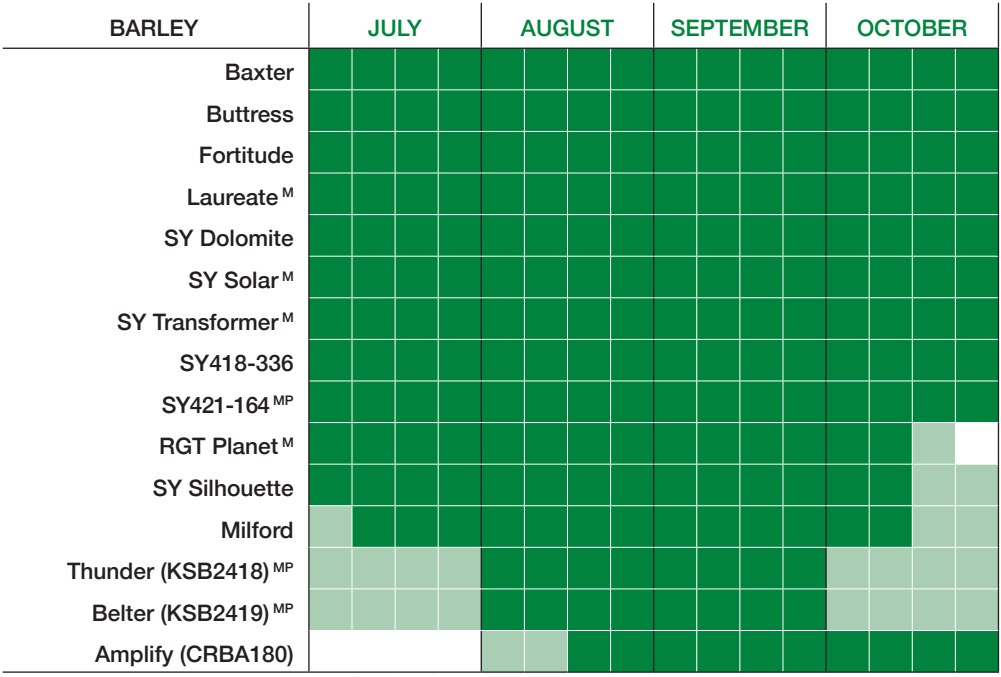
Sth Nth Is (Southern North Island), Cant (Canterbury), Sthld (Southland). *First year in CPT2, so 1-year mean for all sites except Balfour (no data).

Spring sown wheat and barley

These guidelines have been constructed from FAR sowing date trial data combined with agronomic experience and in the case of some new cultivars, UK information is also used.

'Optimal' sowing dates – 'Less ideal' sowing dates –





M Malting, MP Malting potential. End-use has been provided by the breeder/agent and does not guarantee that a contract will be issued for that cultivar. Less information available for new cultivars.

Crops sown in the early window could be at risk from late frosts during flowering and grain fill.

Barley cultivars best sown in the late sowing window are more suited to irrigated, higher fertility sites.

sowing rate calculation

This calculation uses several variables to give an accurate answer for suggested sowing rates.

To use the calculation, you will need to know the following:

- the plant population you want to establish for your crop,
- the thousand grain weight (TGW) of the seed,
- the germination percentage of the seed,
- the expected crop emergence – this is determined by time of sowing, seed quality and management factors (e.g. seed treatment, sowing depth, seed-bed quality).

The steps to follow are:

THOUSAND GRAIN WEIGHT

If using certified seed, the value for thousand grain weight (TGW) should be available on the seed bag or on request. If you need to calculate it for yourself, the number of seeds you will need to count will depend on the accuracy of your scales. Make sure your seed sample is representative of the whole line.

i. If you have scales that will weigh to 0.1 g, count 200 seeds, weigh them and multiply the weight by 5 to get thousand grain weight
ii. If not, count and weigh 1000 seeds.

GERMINATION PERCENTAGE (%)

This should also be on the bag label or available on request. A purity and germination (P&G) test figure is usually quoted. Germination tests determine the maximum germination potential of a given seed line. Some caution is advised as the germination figure does not always equate to the percentage of seeds expected to emerge in the field. This can be due to conditions in the field as well as the physiological quality of a particular seed line and its tolerance to stress.

EMERGENCE PERCENTAGE (%)

Emergence percentage is an estimate based on actual emergence in the field. Further information can be gained from 'stress tests' and 'vigour tests'. These test results are not usually supplied, but may be available on request. Experience certainly helps when deciding on this figure.

Examples of emergence percentage (%) could be:

- June sown: 80% emergence.
- July sown: 75% emergence (assumes may be a poorer quality seedbed, sown too deep, cold soil conditions).
- August – October sown: 80-90% emergence (assumes soil moisture availability and increasing soil temperatures).

$$\text{SOWING RATE (kg/ha)} = \frac{\text{target plant population (p/m}^2\text{)} \times \text{TGW (g)} \times 100}{\text{\% germination rate} \times \text{\% emergence rate}}$$

Examples:

SPRING WHEAT

A wheat sample TGW = 45 g
B germination rate = 90%
C emergence rate = 90%
D target plant population = 250 pl/m^2
E required sowing rate is 139 kg/ha

SPRING BARLEY

A barley sample TGW = 40 g
B germination rate = 90%
C emergence rate = 85%
D target plant population = 225 pl/m^2
E required sowing rate is 118 kg/ha

The calculation can be transformed to determine the actual emergence (%) achieved (useful if poor establishment):

$$\text{EMERGENCE (\%)} = \frac{\textit{actual}\text{ plant population (p/m}^2\text{)} \times \text{TGW (g)} \times 100}{\text{sowing rate (kg/ha)} \times \text{\% germination}}$$

The actual plant population needs to be counted in the field (rod or quadrat methods) for the above calculation, whilst TGW, sowing rate and germination (%) are figures that were known at drilling.

ISSUES FOR SUCCESSFUL ESTABLISHMENT

MOISTURE: Moisture is essential for seed germination. Once germinated, the young seedling is also very fragile and may dry out rapidly if there is insufficient moisture in the root zone. Too much moisture (waterlogging) will mean oxygen starvation, which will lead to germination failure or seedling death.

NUTRITION: Plant roots follow the easiest path for growth, so nutrition should be placed near the roots. Some fertilisers will, however, "burn" seedlings, so they must be placed out of direct contact with the seed.

SEEDBED: A trashy seedbed may reduce seed/soil contact, thereby reducing germination, while a compacted seedbed may restrict emergence. A seedbed with large clods may also force emerging seedlings to become deformed (and therefore weakened) in their attempt to emerge.

SOWING DEPTH: Sown too shallow, seed may be subject to bird damage and susceptible to drying out. If sown too deep, young plants will struggle to emerge and may be weak and therefore prone to disease or may become deformed. Check that your drill is placing seed at its optimum depth. This is also important when considering residual herbicides since some products require a minimum planting depth.

WEEDS, DISEASES AND PESTS: Weeds will compete with the crop for light, moisture and nutrients. Weeds may be more of a problem in thinly sown (or poorly established) crops. The main disease problem for emerging seedlings is fungi affecting the new roots, but these are more likely to occur in a cool, damp environment, when seedlings are less vigorous. Seed treatment with fungicides may be beneficial if seed-borne diseases are a concern, but these treatments may also delay crop emergence. A wide range of pests can cause problems - slugs, weevils, grass grubs, etc. If these are present, control options need to be evaluated.

ESTABLISHMENT TARGETS

Use the sowing rate calculation on the previous page to achieve your establishment target.

Winter/Spring wheat sowings

- June 200 plants/m^2
- July 200 plants/m^2
- August 200-250 plants/m^2
- September 250-300 plants/m^2
- October 300 plants/m^2

Winter/Spring barley sowings

- June 200-225 plants/m^2
- Early spring 225-250 plants/m^2
- Late spring 250-300 plants/m^2

Please note that regional conditions and crop management practices, such as grazing, can influence the target plant population. If you are unsure, check with your local representative.

seed quality and seed treatments

SEED QUALITY

High quality seed has:

- 90% germination or higher
- less than 10% *Fusarium/Microdochium*
- a thousand grain weight (TGW) of 40g or more

Attributes of example seed lots

Seed lot	Germination[1] (%)	Abnormal[2] seedlings (%)	Remainder[3] (%)	Fusarium[4] (%)
A	98	1	1	3
B	80	14	6	14
C	91	7	2	4

[1] percentage of normal seedlings (no defects) reported from the germination test.

[2] percentage of abnormal seedlings (defects such as twisted shoots or stunted roots; such seedlings will not usually emerge).

[3] seeds which have not germinated, either because they are dormant, or more commonly, dead.

[4] seed-borne plant pathogen present after fungicide seed treatment.

Note:
Seed lot A – high quality seed lot.
Seed lot B – reject because of poor germination; the presence of abnormal seedlings and dead seeds indicates the seed lot has undergone physiological deterioration and will struggle to perform once sown; *Fusarium* level may also contribute to emergence problems.
Seed lot C – germination acceptable but some evidence of deterioration.

PATHOGEN THRESHOLDS

- European (UK, Denmark) guidelines suggest that if less than 10% *Fusarium/Microdochium* or 5% *Drechslera* infection, untreated seed can be sown in early autumn or late spring, however no New Zealand thresholds have been established.
- Seed-borne pathogen data for New Zealand cereal seed lots usually not available.
- Advisable to sow fungicide treated seed at all times because of the risk from soil-borne *Fusarium.*
- A zero threshold exists for loose smut and seed-borne barley stripe mosaic virus. Seed lines with loose smut will be rejected from certification and uncertified seed must be treated.

Seed quality details will be freely available from a reputable seed merchant upon request.

SPRING WHEAT AND BARLEY SEED TREATMENT STRATEGIES

FUNGICIDES

1. Consider using Kinto™Duo, Raxil® Star, Rancona® Dimension or Vitaflo® for protection from soil or seed-borne *Fusarium*.
2. Consider using Systiva® for protection from rusts and powdery mildew.
3. All of the products above plus Capri™ provide control of loose smut and bunt.

Current fungicides available for treatment of seeds

Product name	Active ingredient	Mode of Action group
Kinto™ Duo	20 g/L triticonazole + 55 g/L prochloraz	DMI(Triazole); Group 3 Fungicide + DMI(Triazole); Group 3 Fungicide
Raxil® Star	20 g/L fluopyram + 100 g/L prothioconazole + 60 g/L tebuconazole	SDHI; Group 7 Fungicide + DMI(Triazole); Group 3 Fungicide + DMI(Triazole); Group 3 Fungicide
Rancona® Dimension	25 g/L ipconazole + 20 g/L metalaxyl	DMI(Triazole); Group 3 Fungicide PhenylAmide; Group 4 Fungicide
Vitaflo®	200 g/L carboxin + 200 g/L thiram	SDHI; Group 7 Fungicide + Multi-site; Group M3 Fungicide
Systiva®	333 g/L fluxapyroxad	SDHI; Group 7 Fungicide
Capri™	25 g/L tebuconazole	DMI(Triazole); Group 3 Fungicide

Source: Novachem 15/05/2026.

INSECTICIDES

Products based on imidacloprid (e.g. Gaucho®) and clothianidin (e.g. Poncho®) are the only registered insecticide seed treatments providing some control of aphids, grass grub larvae and Argentine stem weevil. They should provide control of aphids up until the plant reaches GS 21, or as the first tiller is appearing. At this time, the plant has grown enough that a dilution effect occurs.

Current products containing either Imidacloprid or Clothianidin for treatment of seed against insect pests

Imidacloprid (Group 4a)	Clothianidin (Group 4a)
Acclaim™	Donaghys Keyrole pro™
Gaucho®	Endow® 600
Punto™	Nipsit inside®
Radicle 600FS	Patrol™
Senator® 600	Poncho®
Starlan®	

Source: Novachem 15/05/2026.

CONSIDERATIONS FOR INSECTICIDE SEED TREATMENT IN SPRING CROPS:

- Insecticide seed treatments can be used for grass grub control, but will be less effective on aphids, as seedling growth occurs too rapidly, increasing the rate of product breakdown. The need for a foliar aphicide should be monitored after GS12/13.
- Growers should consider the economics of insecticide seed treatment versus foliar insecticides if aphid pressure is high. If the crop is sown early, further foliar aphicide applications may be necessary.
- Insecticide seed treatments are likely to be most useful when both grass grub and early aphid protection are needed, when spraying is difficult or inconvenient, or to provide management flexibility.

Note: Any chemical (fungicide or insecticide) has the potential to reduce germination and/or establishment if applied to a physically damaged seed (e.g. seed coat cracked). Cracking may allow the chemical access to the embryo; either killing the seed or resulting in abnormal seedlings.

glossary of terms

4-year adjusted mean

A "4-year adjusted mean" is a mean over trials in the last 4 years. This mean has been adjusted statistically to take account of the absence of some cultivars in some trials (for example, if a cultivar was missing from an especially high yielding trial, it would otherwise be unfairly disadvantaged). This adjustment enables fair comparisons between cultivars within each site and region.

CPT

Cereal performance trials (CPT) comprise of two stages, administered jointly through a single management committee.
CPT 1: Pre-commercial. Assesses performance of advanced breeding lines within a series of collaborative breeder/seed company operated trials. Stage 1 trials only operate in Canterbury.
CPT 2: Focus on performance of close to market pre-commercial and commercial cultivars. Milling and malting cultivars must do a minimum of 2 years in CPT 1 and feed cultivars a minimum of one year in CPT 1 before being eligible for promotion into CPT 2.

CV%

The "Coefficient of Variation", or CV (%), is another measure of the variability in a trial. If the differences between cultivars are similar across all replicates, the trial CV is low (<10%) and the LSD is low (both desirable). If the trial CV is high (>10%), there is a high level of unexplained variation, and the trial results are less accurate.

Falling number

Low falling number scores are an indicator of sprouting. Falling number (FN) is an indirect measure of alpha-amylase levels in the grain with low FN indicating high alpha-amylase activity. FN is tested three weeks after harvest and only on milling wheats.

Limited data

For newer cultivars that we have only evaluated for one or two years, we may not have sufficient disease or agronomic observations to feel confident about the data presented. In this case the data is given in brackets ( ).

LSD

The "Least Significant Difference" is used to compare the mean yields of two cultivars. The difference in yield between two cultivars must be greater than the LSD for those two cultivars to be proven different (statistically at P=0.05). For example, if the LSD is 0.8, a difference between two cultivars of 0.5 is not 'proven', while a difference of 1.2 is proven.
Any cultivar falling within one LSD of the highest yielding cultivar has been highlighted in the yield tables as part of the highest yielding group. Note that some cultivars with the same yield may not appear in the top yielding group due to rounding figures to zero or one decimal place.
An LSD is not provided if the P-value is not significant at the p=0.05 level.

Protein %

The protein content is obtained by measuring the nitrogen (N) content and using a conversion factor to calculate the protein (%). The conversion factors in this booklet are N x 5.7 for all wheat and N x 6.25 for all barley. Some feed wheat users choose to use N x 6.25. To convert the wheat protein from 5.7 to 6.25 use a conversion factor of 1.096 x protein (%).

glossary of terms

P-Value	The "P-value" helps determine whether the observed differences are likely due to differences between varieties or due to chance. A P-value of <0.05 indicates that there is a strong likelihood that the observed differences are repeatable. A P-value of >0.05, indicates differences may have occurred by chance, so it is not considered statistically significant. Where the P-value for a trial is not statistically significant, the LSD (where appropriate) has not been reported in the tables. In these cases, no statistical differences between cultivars have been observed.
PVR	Plant Variety Rights (PVRs) grant plant breeders the exclusive right to commercialise propagating material of a new plant variety. The term of protection for cereals is 20 years. It is illegal to produce and sell seed from the new variety without the express permission of the licence holder for the term of protection. PVR status is recorded in the cultivar descriptions pages, after the cultivar's name, and denotes varieties which have been granted PVR or have filed for PVR (provisional).
Relative yield	Yields relative to a base 100 are given where 100 is the average yield across all cultivars. These relative yields make it easier to compare sites and seasons which may differ widely in mean yields. Yields are given rankings in the cultivar description pages based on this relative yield: Below average: 98 or less, Average: 99 – 101, Above average: 102 – 105, High yielding: 106 and above.
Screenings %	Percentage of small grains, weed seeds and foreign matter which pass through a 2.0 mm rotoscreen.
Test weight	Measured in kilograms per hectolitre (kg/hl), test weight is an indication of grain density. Test weight is reported at a standard grain moisture of 14%.
TGW or TSW	Thousand grain (or seed) weight, reported in grams (g). Grain weight is needed both as a measure of grain quality and for calculating sowing rates.
Weather data	Weather data summaries from the nearest weather station can be found on the FAR website. Search for Harvest Snippets.
Fusarium head blight	Disease caused by *Fusarium* spp.
Leaf rust	Disease caused by *Puccinia recondite* f.sp. *tritici.*
Powdery mildew	Disease caused by *Erysiphe graminis* f.sp. *tritici.*
Septoria tritici blotch (STB)	Disease caused by *Zymoseptoria tritici*, (perfect stage *Mycosphaerella graminicola*).
Stripe rust	Disease caused by *Puccinia striiformis* f.sp. *tritici*.

paddock sowing record

The table below is for you to record your cultivar choice and other useful information for your paddock history.

An example is provided.

Paddock	Previous crop	Cultivar name	Sowing rate (kg/ha)	Seed treatment	Area sown (ha)	Fertiliser (kg/ha)	Sowing date
Bluegum	Forage brassica	Laureate	96 kg/ha	Raxil®Star	10 ha	DAP 200	3 Sept

acknowledgements

FAR would like to thank those who have contributed to the production of this booklet:

HOST FARMERS:
Brendon Moore
Brentin Knox
David Wright
Eric Watson
James Campbell
John and Jono Gardyne
John Ridd
Sean Wilkins
Shaun Miller
Simon and Harry Bonifant
Tim Wright
Will Chambers

TRIAL OPERATORS:

Ashley Harrison	PGG Wrightson Grain
Chetan Parab	New Zealand Institute for Bioeconomy Science
Kevin Sinclair	New Zealand Institute for Bioeconomy Science
Matt Hicks	Cropmark Seeds Ltd
Russell Kirk	New Zealand Institute for Bioeconomy Science

GRADING TESTS:

Tyril Jones	NZ Seedlab

BIOMETRICIAN:

David Baird	VSN NZ Ltd

CONTRIBUTING SCIENTISTS:

Jamie Macalister	New Zealand Institute for Bioeconomy Science
Soonie Chng	New Zealand Institute for Bioeconomy Science

FINANCIAL CONTRIBUTORS:
FAR levy payers
Malteurop
New Zealand Flour Millers Association
Cropmark Seeds, New Zealand Institute for Bioeconomy Science and PGG Wrightson Grain.

GRAPHIC DESIGNER:

Melissa Hillmer	Blueprint Media

BOOKLET PRODUCTION:

Andrew Pitman	Foundation for Arable Research
Anna Heslop	Foundation for Arable Research
Jacqueline Straathof	Foundation for Arable Research
Joanne Drummond	Foundation for Arable Research

ADDING VALUE TO THE BUSINESS OF CROPPING

PO Box 23133
Hornby
Christchurch 8441
New Zealand

Tel: 03 345 5783
Fax: 03 341 7061
Email: far@far.org.nz
www.far.org.nz