

2.3 Advanced Wheat Trial

Researchers

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<u>Aim</u>

To evaluate a number of current and potential varieties that are suited to the high rainfall zone.

To evaluate the yield and quality of these lines.

VARIETY INFORMATION

Brennan

A white grained and awnless, feed quality winter wheat. Resistant to stem, stripe and leaf rusts. Its flowering time is shorter than varieties such as Paterson and Lawson. It is better suited to the shorter growing areas in the high rainfall zone. It is susceptible to sprouting.

Camm

A potential high yielding ASW variety from WA that has potential to go APW. It is a triple rust resistant variety that has not been trialed in the district before. It is early maturing similar to Meering and will be susceptible to frost during flowering.

Currawong

A white grained feed variety susceptible to leaf rust although resistant to stem and stripe rust. It has a medium maturity that is shorter than Declic, Rosella and Kellalac

Declic

A high yielding red grained winter wheat that has proven it self over a number of years. Resistant to stripe rust but it is susceptible to stem and leaf rust. Although a long season wheat its maturity is shorter than other varieties and hence should not be planted too early.

Diamondbird

A medium maturing acid soil tolerant white spring wheat. It is of APW/ASW standard although it is not suitable for the Victorian milling market. It is resistant to the three rusts.

Goldmark

A mid season variety with potential on acid soils. It is stem, stripe and leaf rust resistant. A white grained spring wheat it is of APW quality in Victoria it is a good milling variety suitable for bread with high starch pasting properties.

Gordon

A long season red grained winter wheat that was bred as a possible replacement for Lawson, although to date it has not performed well as Lawson in the south west. Resistant to stripe, stem and leaf rust.

Kellalac

Probably the longest maturity white wheat that we currently have available. It is a spring type wheat that is classed as APW/ASW in Victoria. Susceptible to stem and leaf rust.

Mira (VG127*14)

Mira is a new variety that is hard wheat with good milling characteristics suitable for the domestic or export market. It is a APW quality rust resistant wheat that probably will find a niche in the Wimmera.

Paterson

A red grained feed quality winter wheat that is being phased out due to its lack of stem rust resistance. It has also suffered from leaf rust this year.

Rosella

A soft grained white winter wheat, which has the potential for noodle production. Its maturity is a little earlier than Kellalac and hence should not be sown as early as the red winter wheats. Strong domestic demand for ASW if segregated separately.

Tennant

A red grained winter wheat that was released in limited tonnage this season. Will be more readily available next year. It has excellent rust resistance and is significantly higher yielding than Lawson in long season environments.

Triller

A soft grained biscuit wheat with a winter habit from NSW. Currently classified as GP1 in Victoria.

VK237

A new variety that is expected to be released in 1999. Good rust resistance and it has performed well over most areas. Expected to be classified as AH it will probably be too early maturing for the South West.

Whistler

Formerly known as M5660 it is a potential ASW variety with resistance to stem rust and moderate resistance to stripe and leaf rust.

<u>RESULTS</u>								
Variety	Ham T/ha	%Ham Mean	Str T/ha	% St Mean	LB T/ha	% LB Mean	Av LB + Ham T/ha	% LB + Ham Mean
VK237	5.38	115	100	100	6.36	112	5.87	114
VN0061	4.95	106	3.31	108	6.61	117	5.78	112
VL326	4.85	104	3.53	116	6.43	114	5.64	109
E9.40	5.15	110	4.26	139	6.07	107	5.61	109
TRILLER	5.60	120	-		5.48	97	5.54	107
WHISTLER	5.14	110			5.90	104	5.52	107
VG127*14	5.19	111		1	5.84	103	5.52	107
VN0378	4.44	95	2.14	70	6.54	116	5.49	106
M5395	5.32	114	of the street	1 1 1 1 1 1 1	5.66	100	5.49	106
CURRAWONG	5.01	107	,		5.92	105	5.47	106
VN0027	5.17	111	4.12	135	5.75	102	5.46	106
ROSELLA	4.66	100	100 100	0.45	6.09	108	5.37	104
VN0066	4.85	104	3.09	101	5.88	104	5.36	104
BRENNAN	4.48	96	1.46	48	6.16	109	5.32	103
M5631	4.82	103	Project :	(A. V.)	5.74	101	5.28	102
KELLALAC	4.94	106	2.98	98	5.61	99	5.27	102
VN0022	4.41	94	1.46	48	6.09	108	5.25	102
B93	4.50	96	2.05	67	6.00	106	5.25	102
D197	4.49	96	2.17	71	5.99	106	5.24	101
VN0072	4.54	97	4.29	140	5.93	105	5.23	101
CAMM	4.98	107	200		5.48	97	5.23	101
WW2772	4.74	102	Course of		5.69	101	5.22	101
VN0065	4.71	101	3.74	122	5.63	99	5.17	100
M5487	5.03	108			5.30	94	5.16	100
VN0069	4.62	99	3.59	117	5.63	99	5.13	99
E30.82	4.96	106			5.29	93	5.13	99
VN0031	4.62	99	2.38	78	5.62	99	5.12	99
E120.1	4.50	97	3.12	102	5.61	99	5.06	98
VJ515	4.96	106	2.93	96	5.15	91	5.05	98
E27.24	4.50	96	4.05	133	5.41	96	4.96	96
DECLIC	4.72	101	2.92	96	5.18	91	4.95	96
TENNANT	4.34	93	3.45	113	5.40	95	4.87	94
GORDON	3.99	86	3.94	129	5.73	101	4.86	94
GOLDMARK	4.16	89			5.21	92	4.69	91
F11.9	3.80	82	1.58	52	5.49	97	4.65	90
E88.4	4.03	86	4.42	145	5.22	92	4.62	90
PATERSON	4.01	86	4.20	137	5.09	90	4.55	88
E43.6	3.94	84	2.90	95	4.95	87	4.44	86
DIAMONDBIRD	4.34	93			4.40	78	4.37	85
VN0182	3.76	81	3.59	117	4.93	87	4.34	84
Meering			0.83	27		-		0,
Mean	4.66	+	3.06		5.66		5.16	
CV	7.30		12.7	+ +	8.4		0.10	
SED:	0.29	1	0.329		0.407			
LSD:	0.58		0.658	1	0.811	-		

Code: LB = Lake Bolac, Str = Streatham, Ham = Hamilton

There was some frosting at the Streatham Site which affected the yield of some varieties.

It is important to note the LSD figure. In the case of the Hamilton yields for example, a variety needs to be at least 0.58 T/ha higher in yield for it to be significantly higher yielding than another variety.

Please remember that this only represents 1 year of results and to obtain a clearer picture of the performance of the varieties, a number of years should be taken into consideration.