
INFOSheet

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2004 PERFORMANCE TRIALS FOR WINTER WHEAT

Prepared by the Ontario Cereal Crop Committee

This INFOSheet contains the most recent varietal information on winter wheat that was planted in 2003 and harvested in 2004.

References:

OMAF Publication 811, *Agronomy Guide for Field Crops*

OMAF Publication 812, *Field Crop Protection Guide*

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Table 1 - Ontario Performance Trial; Winter Wheat 2004 – Cumulative Yield Index¹ Summary for Area I & II Combined², OCCC, August 2004

Variety	Class ³	5 year	4 year	3 year	2 year	1 year
AC Ron	sww	102	103	101	100	100
Superior	sww	104	104	103	104	104
AC MacKinnon	sww	102	104	103	103	100
AC Mountain	sww	99	99	99	98	96
Caledonia	sww	100	99	97	93	92
Whitby	sww	101	101	98	97	98
25W41	sww-a					101
Wisdom	srw	103	102	101	100	100
Webster	srw		105	103	101	101
Warwick	srw		103	101	102	102
Whitney ⁵	srw		100	99	97	95
Sisson	srw		97	96	96	95
25R23	srw-a			110	110	111
Vienna	srw			109	109	110
Kristy ⁵	srw			102	100	97
FT Wonder	srw			101	100	102
25R47	srw-a				113	109
RC Strategy	srw				98	98
Tribute	srw					104
AC Morley	hrw	102	101	100	101	104
Maxine	hrw-a	99	98	97	96	96
Platinum	hrw-a	90	91	88	88	90
Warthog	hrw		98	98	98	100
Harvard	hrw			104	103	102
Carlisle	hrw-a			101	100	100
AC Sampson	hrw			97	99	101
Mean (t/ha)		6.22	6.31	6.36	6.41	6.24
No. of locations		37	29	21	14	7

¹ Indexed for each site and then averaged, index = 100 x (variety yield/site yield). Values differing by less than 3 within a column may not represent true differences in yield.

² Area I & II Combined = 2900 West of Frontenac County

³ sww = soft white winter, srw = soft red winter, hrw = hard red winter, a = awned

⁴ Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.

⁵ Entry has been dropped from the 2004/2005 Winter Wheat Performance Trial.

Table 2 - Ontario Performance Trial; Winter Wheat 2004 – Cumulative Yield Index ¹ Summary for Area I², OCCC, August 2004.

Variety	Class ³	5 YR	4 YR	3 YR	2 YR	1 YR
AC Ron	sww	101	102	99	98	98
Superior	sww	103	104	102	103	101
AC Mackinnon	sww	102	104	104	103	99
AC Mountain	sww	99	99	98	96	92
Caledonia	sww	100	98	97	93	93
Whitby	sww	100	100	97	95	96
25W41	sww-a					101
Wisdom	srw	104	101	100	100	98
Webster	srw		105	103	102	100
Warwick	srw		101	100	100	101
Whitney ⁵	srw		101	100	98	96
Sisson	srw		97	96	97	94
25R23	srw-a			113	113	113
Vienna	srw			109	109	112
Kristy ⁵	srw			98	97	95
FT Wonder	srw			100	99	101
25R47	srw-a				114	110
RC Strategy	srw				98	99
Tribute	srw					105
AC Morley	hrw	102	102	101	102	105
Maxine	hrw-a	100	98	97	98	98
Platinum	hrw-a	89	90	87	87	88
Warthog	hrw		99	100	99	102
Harvard	hrw			103	103	105
Carlisle	hrw-a			99	99	100
AC Sampson	hrw			97	98	99
Mean Yield		6.39	6.49	6.65	7.12	6.96
# of Locations		15	12	9	6	3

¹ Indexed for each site and then averaged. Index = 100 x (variety yield/site yield). Values differing by less than 3 within a column may not represent true differences in yield.

² AREA I = 2900 Crop Heat Units or more

³ sww = soft white winter, srw = soft red winter, hrw = hard red winter, a = awned

⁴ Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.

⁵ Entry has been dropped from the 2004/2005 Winter Wheat Performance Trial.

**Table 3 - Ontario Performance Trial; Winter Wheat 2004 – Cumulative Yield Index¹
Summary for Area II², OCCC, August 2004.**

Variety	Class ³	5 YR	4 YR	3 YR	2 YR	1 YR
AC Ron	sww	103	104	102	102	102
Superior	sww	104	104	103	104	106
AC Mackinnon	sww	101	103	102	103	101
AC Mountain	sww	99	99	100	100	99
Caledonia	sww	99	99	96	92	91
Whitby	sww	101	101	98	98	99
25W41	sww-a					101
Wisdom	srw	102	103	102	100	101
Webster	srw		104	103	100	101
Warwick	srw		104	102	103	102
Whitney ⁵	srw		99	98	95	93
Sisson	srw		97	95	95	96
25R23	srw-a			106	106	108
Vienna	srw			108	108	108
Kristy ⁵	srw			105	103	99
FT Wonder	srw			101	101	102
25R47	srw-a				111	108
RC Strategy	srw				97	96
Tribute	srw					103
AC Morley	hrw	101	100	99	99	102
Maxine	hrw-a	98	97	96	94	93
Platinum	hrw-a	90	92	88	89	91
Warthog	hrw		96	96	96	97
Harvard	hrw			104	102	99
Carlisle	hrw-a			102	101	100
AC Sampson	hrw			97	99	102
Mean Yield		6.05	6.13	6.07	5.69	5.51
# of Locations		22	17	12	8	4

¹ Indexed for each site and then averaged. Index = 100 x (variety yield/site yield). Values differing by less than 3 within a column may not represent true differences in yield.

² Area II = West of Frontenac County between 2300 and 2900 Crop Heat Units, Area IV = The Dundalk Plains with less than 2500 heat units, use Area II data

³ sww = soft winter wheat, srw = soft red winter, hrw = hard red winter, a = awned

⁴ Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.

⁵ Entry has been dropped from the 2004/2005 Winter Wheat Performance Trial.

**Table 4 - Ontario Performance Trial; Winter Wheat 2004 – Cumulative Yield Index¹
Summary for Area III², OCCC, August 2004.**

Variety	Class ³	5 YR	4 YR	3 YR	2 YR	1 YR
AC Ron	sww	102	102	101	105	111
Superior	sww	111	112	112	112	115
AC Mackinnon	sww	106	107	103	103	107
AC Mountain	sww	105	105	108	110	114
Caledonia	sww	89	89	93	79	66
Whitby	sww	102	103	95	94	96
25W41	sww-a					85
Wisdom	srw	102	103	102	100	101
Webster	srw		102	104	100	96
Warwick	srw		96	96	90	89
Whitney ⁵	srw		101	99	96	95
Sisson	srw		100	96	91	83
25R23	srw-a			98	95	88
Vienna	srw			107	112	107
Kristy ⁵	srw			108	108	111
FT Wonder	srw			95	95	99
25R47	srw-a				113	109
RC Strategy	srw				103	105
Tribute	srw					96
AC Morley	hrw	94	95	96	97	104
Maxine	hrw-a	93	94	93	94	107
Platinum	hrw-a	95	95	91	89	89
Warthog	hrw		98	98	100	105
Harvard	hrw			103	109	109
Carlisle	hrw-a			99	99	95
AC Sampson	hrw			105	109	118
Mean Yield		5.96	5.94	6.59	7.22	6.76
# of Locations		6	6	4	2	1

¹ Indexed for each site and then averaged. Index = 100 x (variety yield/site yield). Values differing by less than 3 within a column may not represent true difference in yield.

² Area III = East of Frontenac between 2500 and 2900 Crop Heat Units. **There were no yield data for Area III in 2000.

³ sww = soft white winter, srw = soft red winter, hrw = hard red winter, a = awned

⁴ Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.

⁵ Entry has been dropped from the 2004/2005 Winter Wheat Performance Trial.

Table 5 - Ontario Winter Wheat Varietal Characteristics Based on Data from Across Ontario 2004, OCCC, August 2004.

Variety	Class	Test Weight (kg/hl)	1000-Kernel Weight (g)	Winter Survival (%)	Lodgin g (0-9) ¹	Height (cm)	Heading Date ²	Powdery Mildew (0-9) ¹	Leaf Rust (0-9) ¹	Septoria (0-9) ¹
AC Ron	sww	74.1	41	92	0.6	102	158	2.2	2.7	5.1
Superior	sww	74.5	42	91	1.0	100	160	1.7	2.8	4.9
AC Mackinnon	sww	74.0	38	94	0.5	97	157	3.2	1.9	6.4
AC Mountain	sww	73.9	40	92	0.8	100	158	2.4	3.0	5.0
Caledonia	sww	73.0	39	93	0.3	83	158	2.9	4.8	5.4
Whitby	sww	72.3	39	90	2.1	103	161	1.8	1.4	5.6
25W41	sww-a	74.9	36	91	0.4	83	156	4.2	1.0	4.9
Wisdom	srw	76.0	37	94	1.3	90	155	5.0	0.6	6.0
Webster	srw	74.0	36	87	1.6	90	157	3.0	2.5	5.7
Warwick	srw	75.6	42	92	0.9	92	156	2.3	0.9	5.6
Whitney ⁵	srw	76.0	37	87	1.0	77	157	0.7	1.1	6.8
Sisson	srw	76.4	37	90	1.2	77	155	0.5	3.0	7.3
25R23	srw-a	76.3	40	87	0.2	86	157	3.5	2.8	4.6
Vienna	srw	74.4	35	93	1.1	94	158	0.1	3.7	5.0
Kristy ⁵	srw	75.9	41	93	0.9	89	155	1.1	1.0	7.0
FT Wonder	srw	77.3	43	87	1.0	92	156	0.9	4.2	5.8
25R47	srw-a	74.8	38	93	0.8	80	156	1.9	0.7	4.7
RC Strategy	srw	77.4	35	95	0.9	80	156	0.5	2.7	5.3
Tribute	srw	79.1	38	91	0.4	81	155	0.1	1.1	4.2
AC Morley	hrw	78.8	40	90	2.3	113	159	1.4	0.9	4.0
Maxine	hrw-a	78.0	44	93	0.8	90	156	1.3	4.0	6.0
Platinum	hrw-a	78.7	40	92	1.0	109	162	1.5	1.7	4.7
Warthog	hrw	79.0	39	96	0.6	94	158	3.1	1.0	5.4
Harvard	hrw	78.6	45	95	0.3	94	156	2.0	3.3	5.7
Carlisle	hrw-a	79.0	48	93	0.4	83	154	2.3	2.2	6.7
AC Sampson	hrw	75.4	42	93	1.3	97	161	1.6	3.2	5.4
# of Locations		9	9	1	4	9	8	6	2	4

¹ For ratings 0-9, a high score is undesirable.

² Heading may vary from year to year and should only be used to indicate relative differences.

³ Entry has been dropped from the 2004-2005 Winter Wheat Performance Trial.

Table 6 - Varietal Fusarium Performance Data

Variety	Class	Fusarium Head Blight Index (0-100) ¹			DON (ppm) ²		
		3 yr	2 yr	2004	3 yr	2 yr	2004
AC Ron	sww	30	29	27	10	11	13
Superior	sww	22	22	18	9	12	20
AC Mackinnon	sww	41	49	47	12	16	19
AC Mountain	sww	27	26	29	7	8	10
Caledonia	sww	36	35	34	14	17	13
Whitby	sww	21	20	17	8	10	8
25W41	sww-a			18			6
Wisdom	srw	21	21	22	4	5	2
Webster	srw	27	29	29	7	9	7
Warwick	srw	26	27	28	7	9	11
Whitney ⁵	srw	41	47	39	12	15	15
Sisson	srw	37	41	31	10	12	11
25R23	srw-a	26	28	33	8	8	6
Vienna	srw	18	21	20	6	8	5
Kristy ⁵	srw	29	31	31	5	6	5
FT Wonder	srw	7	7	7	3	4	8
25R47	srw-a		24	23	9	9	4
RC Strategy	srw		33	36	9	9	6
Tribute	srw			27			4
AC Morley	hrw	20	20	20	4	5	6
Maxine	hrw-a	28	31	31	6	8	7
Platinum	hrw-a	15	13	7	5	6	9
Warthog	hrw	23	22	21	4	5	3
Harvard	hrw	28	30	32	6	8	8
Carlisle	hrw-a	28	29	24	6	7	4
AC Sampson	hrw	28	28	24	10	12	12
# of Locations		8	6	3	6	4	1

¹ % spikelets infected x % heads infected in inoculated, mist irrigated trials at Ridgetown, Nairn and Ottawa. Values differing by less than 20 may not represent true differences in fusarium reaction.

² Deoxynivalenol (vomitoxin) in parts per million at Ridgetown, Nairn and Ottawa in inoculated trials.