Ontario Winter Wheat Performance Trial 2002

Ministry of Agriculture and Food
Crop Technology Branch

Author: Ontario Cereal Crop Committee
Creation Date: August 1, 2002
Last Reviewed: August 7, 2003

Contents:

This report contains the most recent varietal information on winter wheat that was planted in 2001 and harvested in 2002.

Cumulative Yield Index [1] Summary for Area I [2]

OCCC August, 2002.

Cultivar	Class [3]	5 year	4 year	3 year	2 year	1 year
Harus[5]	sww	99	98	100	101	97
Karena[5]	sww	98	98	100	102	98
AC Ron	sww	100	101	102	105	101
OAC Ariss[5]	sww	98	99	99	101	96
AC Cartier	sww	94	95	94	94	96
25W33	sww-a	103	102	102	101	101
Superior	sww	100	101	101	102	102
25W60	sww-a	111	108	109	108	106
AC MacKinnon	sww	100	98	99	102	101
AC Mountain	sww	102	99	99	99	101
AC Essex	sww	103	101	101	101	103
Caledonia	sww	---	103	103	102	105
Whitby	sww	---	---	101	104	98
Watford [5]	sww	---	---	---	99	102
VA96W.403WS[5]	sww	---	---	---	---	100
TW006.007	sww	---	---	---	---	104
Stealth	srw	---	102	104	102	95
Wisdom	srw	---	104	104	100	102
Webster	srw	---	---	---	105	106
Warwick	srw	---	---	---	100	99
25R37[5]	srw	---	---	---	104	103
25R49	srw	---	---	---	108	107
RC Doyle[5]	srw	---	---	---	94	94
PRO 202SRW	srw-a	---	---	---	99	96
Whitney	srw	---	---	---	104	104
Sisson	srw	---	---	---	95	95
25R26	srw-a	---	---	---	---	99
25R23	srw-a	---	---	---	---	107
Vienna	srw	---	---	---	---	106
Kristy	srw	---	---	---	---	104
TW005.008	srw	---	---	---	---	105
OTH017.033	srw-a	---	---	---	---	101
Fundulea	hrw	96	95	95	94	94
AC Morley	hrw	96	98	100	100	96
Maxine	hrw-a	---	98	100	96	96
Gryphon	hrw	---	---	102	99	97
Platinum	hrw-a	---	---	87	92	87
Warthog	hrw	---	---	---	97	98
Waldorf [5]	hrw	---	---	---	92	91
CM98036	hrw	---	---	---	---	103
CM98091	hrw-a	---	---	---	---	101
AC Sampson[5]	hrw	---	---	---	---	96
TW95412[5]	spww	---	---	---	---	106
Mean (t/ha)	---	5.8	6.06	6.05	5.99	5.79
No. 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, spww = specialty white 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

[5] Entry has been dropped from the 2002/2003 Winter Wheat Performance Trial.

Cumulative Yield Index [1] Summary for Area II [2]

OCCC August, 2002.

Cultivar	Class [3]	5 year	4 year	3 year	2 year	1 year
Harus [5]	sww	99	98	99	99	96
Karena [5]	sww	101	101	101	100	96
AC Ron	sww	102	101	104	104	102
OAC Ariss [5]	sww	98	98	99	99	95
AC Cartier	sww	95	96	94	95	93
25W33	sww-a	103	103	104	103	102
Superior	sww	105	104	104	103	99
25W60	sww-a	104	102	103	102	106
AC MacKinnon	sww	101	99	100	103	99
AC Mountain	sww	99	97	98	98	99
AC Essex	sww	101	100	101	102	103
Caledonia	sww	---	102	103	105	104
Whitby	sww	---	---	103	102	96
Watford [5]	sww	---	---	---	101	103
VA96W.403WS [5]	sww	---	---	---	---	99
TW006.007	sww	---	---	---	---	104
Stealth	srw	---	103	103	101	102
Wisdom	srw	---	103	103	102	103
Webster	srw	---	---	---	106	106
Warwick	srw	---	---	---	103	99
25R37 [5]	srw	---	---	---	100	106
25R49	srw	---	---	---	107	107
RC Doyle [5]	srw	---	---	---	92	92
PRO 202SRW	srw-a	---	---	---	101	96
Whitney	srw	---	---	---	103	104
Sisson	srw	---	---	---	98	93
25R26	srw-a	---	---	---	---	103
25R23	srw-a	---	---	---	---	106
Vienna	srw	---	---	---	---	107
Kristy	srw	---	---	---	---	108
TW005.008	srw	---	---	---	---	106
OTH017.033	srw-a	---	---	---	---	102
Fundulea	hrw	93	92	92	92	92
AC Morley	hrw	101	101	101	100	96
Maxine	hrw-a	---	101	100	99	98
Gryphon	hrw	---	---	100	101	100
Platinum	hrw-a	---	---	90	93	86
Warthog	hrw	---	---	---	94	96
Waldorf [5]	hrw	---	---	---	92	92
CM98036	hrw	---	---	---	---	107
CM98091	hrw-a	---	---	---	---	104
AC Sampson [5]	hrw	---	---	---	---	92
TW95412 [5]	spww	---	---	---	---	106
Mean (t/ha)	---	6.16	6.19	6.31	6.62	6.94
No. of locations	---	23	19	14	9	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 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 white winter, srw = soft red winter, hrw = hard red winter, spww = specialty white 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 2002/2003 Winter Wheat Performance Trial.

Cumulative Yield Index [1] Summary for Area III [2**]

OCCC August, 2002.

Cultivar	Class [3]	5 year	4 year	3 year	2 year	1 year
Harus [5]	sww	95	97	99	100	102
Karena [5]	sww	98	99	102	102	103
AC Ron	sww	102	103	101	102	99
OAC Ariss [5]	sww	94	93	95	95	94
AC Cartier	sww	105	107	107	107	101
25W33	sww-a	99	100	99	99	106
Superior	sww	110	112	112	113	112
25W60	sww-a	97	98	97	98	107
AC MacKinnon	sww	107	108	109	109	103
AC Mountain	sww	104	105	103	103	106
AC Essex	sww	107	108	106	106	103
Caledonia	sww	---	98	95	95	107
Whitby	sww	---	---	107	108	98
Watford [5]	sww	---	---	---	102	103
VA96W:403WS [5]	sww	---	---	---	---	105
TW006:007	sww	---	---	---	---	108
Stealth	srw	---	90	89	89	82
Wisdom	srw	---	105	104	104	104
Webster	srw	---	---	---	103	108
Warwick	srw	---	---	---	100	103
25R37 [5]	srw	---	---	---	92	98
25R49	srw	---	---	---	100	104
RC Doyle [5]	srw	---	---	---	92	97
PRO 202SRW	srw-a	---	---	---	99	93
Whitney	srw	---	---	---	104	103
Sisson	srw	---	---	---	105	102
25R26	srw-a	---	---	---	---	80
25R23	srw-a	---	---	---	---	103
Vienna	srw	---	---	---	---	102
Kristy	srw	---	---	---	---	108
TW005:008	srw	---	---	---	---	102
OTH017:033	srw-a	---	---	---	---	95
Fundulea	hrw	89	91	89	89	97
AC Morley	hrw	93	93	94	94	95
Maxine	hrw-a	---	94	94	94	93
Gryphon	hrw	---	---	101	102	89
Platinum	hrw-a	---	---	98	99	93
Warthog	hrw	---	---	---	98	98
Waldorf [5]	hrw	---	---	---	100	92
CM98036	hrw	---	---	---	---	97
CM98091	hrw-a	---	---	---	---	100
AC Sampson [5]	hrw	---	---	---	---	103
TW95412 [5]	spww	---	---	---	---	104
Mean (t/ha)	---	5.3	5.2	5.3	5.29	5.93
No. of locations	---	6	5	4	4	2

[1] Indexed for each site and then averaged. Index = 100 x (variety yield/site yield). Values differing by less than 3 within a column

[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, spww = specialty white 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

[5] Entry has been dropped from the 2002/2003 Winter Wheat Performance Trial.

Ontario Winter Wheat Varietal Characteristics Based on Data From Across Ontario 2002

OCCC August, 2002

(a)

Cultivar	Class	Test Weight (kg/hl)	1,000- Kernel Weight (g)	Winter Survival (%)	Lodging (0-9) [1]	Height (cm)
AC Ron	sww	74.2	39	94	1.0	109
AC Cartier	sww	75.8	39	94	1.0	110
25W33	sww-a	74.0	32	92	0.5	89
Superior	sww	75.6	40	93	1.1	106
25W60	sww-a	75.1	35	93	1.8	97
AC MacKinnon	sww	73.7	37	95	0.7	106
AC Mountain	sww	73.4	38	95	1.0	105
AC Essex	sww	73.5	38	95	0.6	103
Caledonia	sww	74.2	39	96	0.3	94
Whitby	sww	73.3	39	93	1.8	110
TW006:007	sww	73.8	37	96	1.7	108
Stealth	srw	74.7	35	91	0.2	98
Wisdom	srw	74.9	35	93	1.7	98
Webster	srw	74.8	36	94	2.6	100
Warwick	srw	75.9	37	95	1.5	101
25R49	srw	76.1	39	93	0.7	90
PRO 202SRW	srw-a	74.5	38	94	0.2	91
Whitney	srw	76.5	35	93	1.2	88
Sisson	srw	76.2	36	87	0.8	85
25R26	srw-a	73.7	34	90	0.3	88
25R23	srw-a	75.8	38	93	0.1	96
Vienna	srw	75.5	35	86	1.2	102
Kristy	srw	75.3	39	94	1.9	98
TW005:008	srw	75.7	37	92	1.4	98
OTH017:033	srw-a	76.1	42	91	2.3	99
Fundulea		79.3	36	95	0.2	103
AC Morley	hrw	78.6	38	93	1.5	119
Maxine	hrw-a	78.2	40	87	0.3	98
Gryphon	hrw	77.5	44	89	0.2	104
Platinum	hrw-a	79.4	39	96	1.1	116
Warthog	hrw	79.0	36	93	0.3	106
CM98036	hrw	79.8	44	93	0.3	103
CM98091	hrw-a	78.9	46	93	0.3	93
No. of locations		10	10	3	7	10

continued on next page…

Ontario Winter Wheat Varietal Characteristics Based on Data From Across Ontario 2002

OCCC August, 2002

(b)

Cultivar	Heading Date [2]	Powdery Mildew (0-9) [1]	Leaf Rust (0-9) [1]	Septoria (0-9) [1]	Glume Blotch (0-9) [1]	Fusarium Head Blight Index (0-100) [3]	DON (ppm) [4]
AC Ron	163	1.9	6.0	5.2	0.8	31.4	5.56
AC Cartier	163	1.5	2.9	5.5	1.5	28.5	3.52
25W33	160	1.4	0.0	5.4	1.3	27.8	6.68
Superior	164	1.4	5.0	5.2	0.5	21.2	2.59
25W60	158	2.0	0.0	5.2	1.2	25.9	7.32
AC MacKinnon	160	2.0	7.2	5.9	1.8	24.3	1.48
AC Mountain	161	2.0	7.2	5.4	0.5	23.9	2.90
AC Essex	161	1.9	5.2	5.4	0.9	24.9	4.47
Caledonia	161	1.8	0.9	4.9	0.5	39.4	6.02
Whitby	164	1.5	2.9	5.2	0.5	18.0	2.20
TW006:007	162	1.9	0.0	5.2	1.4	30.2	3.96
Stealth	161	2.6	6.0	4.9	1.0	13.1	2.17
Wisdom	158	2.8	0.0	5.6	2.0	18.9	0.50
Webster	159	1.6	0.0	5.5	0.9	19.4	2.74
Warwick	158	2.2	2.9	5.6	0.6	20.4	1.11
25R49	159	2.5	1.0	5.4	1.6	31.3	3.04
PRO 202SRW	160	0.7	5.0	6.3	0.9	32.7	7.28
Whitney	160	0.1	2.5	6.3	1.1	25.3	2.38
Sisson	159	0.0	2.0	6.2	1.9	31.3	2.51
25R26	161	2.2	0.0	5.2	0.9	32.1	2.94
25R23	161	2.5	3.9	4.7	0.6	17.9	7.21
Vienna	161	0.0	0.0	5.3	1.0	6.0	0.56
Kristy	158	0.1	1.9	5.9	1.4	19.4	0.94
TW005:008	162	0.4	2.0	4.8	0.9	25.7	3.07
OTH017:033	158	1.2	0.8	5.6	0.8	7.6	0.52
Fundulea	164	2.8	4.0	5.1	1.5	20.2	3.81
AC Morley	162	0.6	3.7	5.1	1.1	12.2	2.20
Maxine	160	0.0	0.0	5.9	1.0	17.4	1.74
Gryphon	162	0.0	0.9	5.5	1.8	25.9	2.92
Platinum	165	0.4	0.9	5.2	0.9	18.5	1.09
Warthog	162	3.0	2.7	5.2	1.4	18.2	2.68
CM98036	161	0.0	0.0	5.4	1.5	19.8	2.65
CM98091	158	0.8	0.0	6.1	1.9	25.0	1.87
No. of locations	9	4	2	5	2	2	1

[1] For ratings 0-9, a high score is undesirable.
[2] Heading may vary from year to year and should only be used to indicatie relative differences.
[3] % spikelets infected x % heads infected in inoculated, mist irrigated trials at Ridgetown College and Ottawa.
[4] Deoxynivalenol (vomitoxin) in parts per million at Ridgetown College trials.