

Agriculture Development Branch 2009 Performance Trials for Winter Wheat

Prepared by the Ontario Cereal Crop Committee

Infosheet

AUGUST 2009

This infosheet contains the most recent varietal information on winter wheat that was planted in 2008 and harvested in 2009.

Additional information on these trials is available at www.gocereals.ca

REFERENCES:

OMAFRA Publication 811, Agronomy Guide for Field Crops

OMAFRA Publication 812, Field Crop Protection Guide

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TABLE 1 – Ontario Performance Trial: Winter Wheat 2009 – Cumulative Yield Index¹ Summary for Area I & II Combined², OCCC, August 2009.

Variety	Class ³	5 year	4 year	3 year	2 year	2009
Superior	sww	99 ⁴	99	100	98	98
AC Mackinnon	sww	101	101	100	99	100
AC Mountain	sww	100	100	100	100	103
D8006W	sww-a	102	102	103	101	104
Ava	sww		102	103	102	105
E1009W	sww		100	98	96	100
E0028W	sww			104	102	105
OTF013-081	sww			93	95	94
25W36	sww				101	99
25W43	sww				102	103
Vienna	srw	99	96	97	98	100
FT Wonder	srw	97	96	96	96	97
25R47	srw-a	107	104	106	103	103
Emmit	srw	108	106	106	104	103
E1007R	srw-a	104	103	103	102	104
R045	srw-a	104	104	106	106	105
Huntley	srw-a	102	101	102	102	100
Becher	srw		103	102	102	103
ADV Dyno	srw		95	94	90	88
R055	srw		103	103	103	103
25R56	srw		106	106	104	107
Branson	srw			105	104	102
25R51	srw			103	104	100
HY 116-SRW	srw				105	104
Surge	srw				104	101
Palmer	srw					97
AC Morley	hrw	98	99	100	101	100
Maxine	hrw-a	93	92	92	95	95
Warthog	hrw	97	97	97	97	96
Harvard	hrw	96	95	95	95	96
Carlisle	hrw-a	96	94	94	94	96
Wentworth	hrw		101	102	103	105
Stanford	hrw			91	90	88
Princeton	hrw				100	98
Means		6.00	5.99	5.80	5.83	5.50
Locations		32	25	19	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.

TABLE 2 – Ontario Performance Trial: Winter Wheat 2009 – Cumulative Yield Index¹ Summary for Area I², OCCC, August 2009.

Variety	Class ³	5 year	4 year	3 year	2 year	2009
Superior	sww	100 ⁴	99	99	100	101
AC Mackinnon	sww	102	101	100	99	99
AC Mountain	sww	102	101	100	100	100
D8006W	sww-a	101	103	105	103	101
Ava	sww		101	101	100	100
E1009W	sww		101	99	96	99
E0028W	sww			105	102	103
OTF013-081	sww			91	94	97
25W36	sww				102	97
25W43	sww				103	104
Vienna	srw	98	96	96	98	102
FT Wonder	srw	98	96	96	97	98
25R47	srw-a	110	108	109	107	105
Emmit	srw	105	103	103	99	98
E1007R	srw-a	104	104	104	104	104
R045	srw-a	103	104	106	108	107
Huntley	srw-a	103	102	104	104	103
Becher	srw		103	105	107	108
ADV Dyno	srw		97	96	91	89
R055	srw		102	102	101	100
25R56	srw		107	107	102	104
Branson	srw			104	103	103
25R51	srw			104	104	99
HY 116-SRW	srw				101	104
Surge	srw				106	106
Palmer	srw					101
AC Morley	hrw	97	97	97	97	95
Maxine	hrw-a	91	89	89	93	92
Warthog	hrw	98	98	96	95	92
Harvard	hrw	96	95	95	95	93
Carlisle	hrw-a	94	92	92	92	95
Wentworth	hrw		101	101	105	108
Stanford	hrw			91	90	93
Princeton	hrw				105	102
Means		6.09	6.23	6.01	6.11	6.13
Locations		16	13	10	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.

TABLE 3 – Ontario Performance Trial: Winter Wheat 2009 – Cumulative Yield Index¹ Summary for Area II², OCCC, August 2009.

Variety	Class ³	5 year	4 year	3 year	2 year	2009
Superior	sww	98 ⁴	98	100	98	94
AC Mackinnon	sww	101	101	100	99	100
AC Mountain	sww	98	99	99	99	106
D8006W	sww-a	102	101	100	100	107
Ava	sww		104	105	104	110
E1009W	sww		99	97	95	100
E0028W	sww			103	102	106
OTF013-081	sww			97	96	91
25W36	sww				100	101
25W43	sww				100	102
Vienna	srw	99	96	98	97	98
FT Wonder	srw	97	95	96	96	96
25R47	srw-a	104	101	101	101	100
Emmit	srw	111	110	109	109	109
E1007R	srw-a	104	103	101	101	103
R045	srw-a	105	105	106	105	104
Huntley	srw-a	101	99	99	100	98
Becher	srw		102	99	99	98
ADV Dyno	srw		93	92	90	86
R055	srw		105	104	105	106
25R56	srw		105	104	105	110
Branson	srw			105	106	101
25R51	srw			103	103	101
HY 116-SRW	srw				109	104
Surge	srw				102	97
Palmer	srw					94
AC Morley	hrw	99	101	103	104	104
Maxine	hrw-a	95	95	96	96	98
Warthog	hrw	95	97	97	99	99
Harvard	hrw	95	95	96	95	98
Carlisle	hrw-a	98	97	96	96	98
AC Sampson	hrw	98	98	101	100	100
Wentworth	hrw		102	102	102	103
Stanford	hrw			92	90	83
Princeton	hrw				96	95
Means		5.90	5.72	5.57	5.61	5.02
Locations		16	12	9	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.

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.

TABLE 4 – Ontario Performance Trial: Winter Wheat 2009 – Cumulative Yield Index¹ Summary for Area III², OCCC, August 2009.

Variety	Class ³	4 year	3 year	2 year	2009
Superior	sww	100 ⁴	101	99	94
AC Mackinnon	sww	102	101	99	99
D8006W	sww-a	103	105	110	112
Ava	sww	107	108	111	118
E1009W	sww	95	95	94	96
Ninja	sww		94	86	76
E0028W	sww		110	111	116
OTF013-081	sww		88	87	86
FT Wonder	srw	93	95	93	96
Emmit	srw	111	112	114	118
E1007R	srw-a	107	108	108	108
R045	srw-a	97	99	98	94
Becher	srw	102	104	108	108
R055	srw	99	101	105	106
Branson	srw		103	103	102
HY 116-SRW	srw			101	107
Surge	srw			104	104
Palmer	srw				102
AC Morley	hrw	97	97	95	93
Warthog	hrw	94	93	91	88
Harvard	hrw	92	92	88	86
AC Sampson	hrw	99	100	100	101
Wentworth	hrw	102	102	107	110
Benefit	hrw		99	98	97
Stanford	hrw		91	89	81
Princeton	hrw			93	90
CARNAVAL	hrw-a			107	111
Means		5.40	5.11	5.18	5.78
Locations		11	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 III = East 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.

All Area III trials lost in 2005, thus no 5 year averages to report.

TABLE 5a – Ontario Winter Wheat Varietal Characteristics Based on Data from Area I, OCCC, August 2009.

Variety	Test Weight (kg/hl)	Protein (%)	Thousand Kernel Weight (g)	Height (cm)	Heading Date ² (JD)	Powdery Mildew (0-9) ¹	Leaf Rust (0-9) ¹	Leaf Septoria (0-9) ¹	Physiological Fleck (0-9) ¹	Fusarium Rating ⁴	Years (fusarium Data)
Superior	74.5	10.6	46.8	99	159	0.1	1.5	2.3	1.4	S	7
AC Mackinnon	75.1	10.9	47.0	95	155	0.6	1.9	2.8	1.3	HS	7
AC Mountain	74.2	10.2	46.2	98	156	0.8	1.7	2.8	1.1	S	7
D8006W	76.3	11.1	48.6	89	155	0.1	1.5	2.9	1.2	S	5
Ava	75.0	10.5	43.4	96	158	1.1	1.5	1.8	1.3	MR	3
E1009W	77.0	11.7	46.8	85	156	0.8	2.6	2.4	1.4	S	3
E0028W	73.3	11.5	49.0	85	154	0.5	2.6	3.1	1.5	HS	2
OTF013-081	73.9	11.0	45.5	110	160	0.8	0.4	2.4	1.2	MS	2
25W36	76.4	10.7	40.6	84	156	0.0	1.6	2.8	1.3	HS	1
25W43	74.5	10.9	41.1	82	155	1.3	1.2	2.6	1.5	S	1
Vienna	76.0	9.6	40.3	94	155	3.5	5.1	3.0	1.4	MR	7
FT Wonder	77.1	10.9	50.1	92	155	0.3	3.2	3.1	1.6	MR	7
25R47	74.6	11.3	43.5	83	154	1.5	0.8	2.3	1.4	MS	6
Emmit	75.6	11.0	45.7	90	155	0.9	2.1	3.1	1.2	MS	5
E1007R	77.0	11.0	44.2	87	155	1.1	3.3	2.4	1.1	S	4
R045	77.6	11.1	44.0	84	154	1.1	1.9	2.3	1.2	HS	4
Huntley	78.9	11.2	48.5	97	153	0.4	0.9	3.0	1.3	MS	3
Becher	75.4	10.5	47.7	97	156	0.4	0.3	1.9	1.1	HS	3
ADV Dyno	76.2	11.6	46.8	88	155	0.1	2.4	2.6	1.2	MS	3
R055	77.5	11.8	44.2	87	155	0.8	1.5	2.4	1.3	S	3
25R56	74.7	10.1	39.8	82	155	1.0	0.6	2.4	1.0	S	3
Branson	75.9	11.2	43.2	82	152	0.3	1.9	2.6	1.2	S	2
25R51	75.7	11.3	44.0	86	152	2.3	1.8	2.9	1.7	MR	2
HY 116-SRW	76.7	10.8	51.0	94	156	0.0	0.4	2.3	1.3	S	1
Surge	78.4	11.3	43.3	85	154	0.9	2.6	2.5	1.4	MS	1
Palmer	75.7	10.3	42.9	94	153	1.0	2.2	2.4	1.3		
AC Morley	77.7	11.0	46.0	115	157	0.0	0.7	2.5	2.2	MR	7
Maxine	79.2	11.8	49.1	91	154	0.9	1.7	4.1	1.5	S	7
Warthog	79.6	11.2	43.7	96	157	0.3	0.5	3.2	1.3	MS	7
Harvard	79.2	11.3	49.8	92	154	0.6	1.3	3.6	1.5	HS	7
Carlisle	80.6	11.6	56.0	87	153	1.3	2.1	4.0	2.6	MS	7

Wentworth	79.0	11.2	55.0	93	156	1.1	0.3	3.2	1.3	HS	3
Stanford	77.0	12.0	53.6	84	157	0.0	0.4	3.1	1.1	S	2
Princeton	77.8	11.0	51.1	96	156	1.8	0.6	3.1	4.7	S	1
Means	76.6	11.0	46.4	91	155	0.8	1.6	2.8	1.5		
Locations	3	2	3	3	3	2	3	3	3		

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.

⁴ Fusarium ratings are based on Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.

MR=moderately resistant (best); MS=moderately susceptible; S=susceptible; HS=highly susceptible (worst).

2008 ratings. 2009 ratings will be posted as soon as the information becomes available (approximately September 7th).

TABLE 5b – Ontario Winter Wheat Varietal Characteristics Based on Data from Area II, OCCC, August 2009.

Variety	Test Weight (kg/hl)	Protein (%)	Thous and Kernel Weight (g)	Winter Survival (%)	Lodging (0-9) ¹	Height (cm)	Heading Date ² (JD)	Powdery Mildew (0-9) ¹	Leaf Rust (0-9) ¹	Leaf Septoria (0-9) ¹	Septoria Glume Blotch (0-9) ¹	Physiological Fleck (0-9) ¹	Fusarium Rating ⁴	Years (fusarium Data)
Superior	78.1	--	40.7	78	0.5	103	166	2.8	1.3	4.7	0.3	2.9	S	7
AC Mackinnon	76.9	--	37.8	78	0.0	99	163	1.4	0.2	5.6	0.0	1.8	HS	7
AC Mountain	76.4	--	41.0	81	0.8	105	164	2.3	0.3	4.6	0.5	2.6	S	7
D8006W	77.6	--	42.4	83	0.0	95	162	1.1	0.0	5.4	0.0	2.9	S	5
Ava	78.0	--	39.1	81	1.0	104	166	3.0	0.7	4.6	0.5	1.4	MR	3
E1009W	77.7	--	37.4	76	0.0	83	164	1.8	0.2	5.6	0.0	5.1	S	3
E0028W	76.2	--	39.3	83	0.0	89	163	1.3	0.8	6.3	0.5	2.5	HS	2
OTF013-081	74.8	--	39.8	71	1.0	108	167	1.7	0.7	3.6	0.5	0.9	MS	2
25W36	77.3	--	34.6	75	0.0	87	165	2.0	1.5	4.5	0.5	1.6	HS	1
25W43	75.1	--	33.0	76	0.0	85	163	3.7	0.8	4.7	0.3	3.9	S	1
Vienna	76.6	--	35.3	76	0.3	97	164	3.8	4.2	4.3	0.8	3.3	MR	7
FT Wonder	79.2	--	44.3	75	0.0	90	164	0.7	4.3	4.8	0.5	1.6	MR	7
25R47	77.4	--	39.1	78	0.0	81	163	3.4	0.5	4.4	0.8	4.1	MS	6
Emmit	78.6	--	41.7	81	0.0	95	164	2.4	2.2	4.9	1.5	1.6	MS	5
E1007R	77.4	--	37.3	75	0.0	88	163	1.4	0.7	5.6	0.5	1.0	S	4
R045	79.1	--	39.3	78	0.0	84	162	2.3	1.7	5.3	0.5	1.1	HS	4
Huntley	78.9	--	42.7	75	1.0	98	162	2.4	1.3	4.0	0.5	1.9	MS	3
Becher	77.7	--	41.3	74	0.3	98	164	0.9	0.5	4.1	0.3	1.4	HS	3
ADV Dyno	74.7	--	39.3	36	0.0	91	164	1.0	0.5	5.8	0.3	2.9	MS	3
R055	78.1	--	38.0	79	0.5	87	163	0.8	0.2	4.7	0.5	2.5	S	3
25R56	77.7	--	34.7	80	0.0	86	163	3.3	0.7	4.5	0.8	2.3	S	3
Branson	77.4	--	37.6	73	0.5	83	162	2.1	1.0	3.7	1.3	1.3	S	2
25R51	77.2	--	36.9	79	0.0	86	162	3.6	2.2	4.3	0.3	4.6	MR	2
HY 116-SRW	78.2	--	46.2	76	0.3	97	164	0.5	0.2	3.9	1.0	2.8	S	1
Surge	78.0	--	38.8	76	0.0	85	163	2.8	1.2	4.8	0.5	1.3	MS	1
Palmer	77.3	--	38.2	55	0.0	93	163	3.6	2.2	3.8	0.5	2.5		
AC Morley	80.1	10.5	42.7	77	1.8	121	166	2.4	0.3	3.7	0.3	2.9	MR	7
Maxine	79.5	10.3	45.8	78	0.0	90	162	2.9	0.7	5.5	0.3	4.4	S	7
Warthog	80.2	10.5	39.0	81	0.0	95	165	2.6	0.2	4.8	0.3	1.0	MS	7

Harvard	79.2	10.4	44.5	81	0.0	95	163	3.4	0.5	5.1	1.8	2.5	HS	7
Carlisle	81.1	10.5	49.9	80	0.0	85	161	2.8	0.3	6.0	0.3	3.3	MS	7
AC Sampson	76.3	10.9	41.5	76	0.3	101	168	2.7	2.3	4.7	1.0	0.8	HS	7
Went-worth	78.0	10.4	50.5	81	0.0	97	164	3.4	1.0	5.1	0.5	1.6	HS	3
Stanford	75.5	10.5	46.2	60	0.0	82	166	1.4	0.0	4.1	1.5	1.1	S	2
Princeton	77.5	9.5	45.1	75	0.0	100	165	4.1	0.2	5.5	1.0	4.5	S	1
Means	77.7	10.4	40.6	75	0.2	93	164	2.3	1.0	4.8	0.6	2.4		
Locations	4	1	4	4	1	4	4	2	3	4	1	2		

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.

⁴ Fusarium ratings are based on Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.

MR=moderately resistant (best); MS=moderately susceptible; S=susceptible; HS=highly susceptible (worst).

2008 ratings. 2009 ratings will be posted as soon as the information becomes available (approximately September 7th).

TABLE 5c – Ontario Winter Wheat Varietal Characteristics Based on Data from Area III, OCCC, August 2009.

Variety	Test Weight (kg/hl)	Thousand Kernel Weight (g)	Winter Survival (%)	Lodging (0-9) ¹	Height (cm)	Heading Date ² (JD)	Powdery Mildew (0-9) ¹	Fusarium Rating ⁴	Years (fusarium Data)
Superior	69.9	43.1	59	1.4	105	164	2.5	S	7
AC Mackinnon	71.4	44.8	63	1.3	106	160	1.0	HS	7
D8006W	69.6	44.8	63	2.1	99	160	1.0	S	5
Ava	72.3	42.8	61	1.4	107	163	1.0	MR	3
E1009W	72.1	44.7	64	0.6	92	162	2.5	S	3
Ninja	73.1	44.8	65	1.9	123	163	1.0	S	2
E0028W	69.0	46.9	67	1.5	95	160	1.0	HS	2
OTF013-081	69.4	39.1	56	5.3	116	165	2.5	MS	2
FT Wonder	74.2	49.1	67	1.8	100	160	1.0	MR	7
Emmit	71.5	43.7	70	1.1	101	161	2.8	MS	5
E1007R	70.8	43.0	61	0.8	94	160	1.0	S	4
R045	72.7	43.7	60	0.9	89	160	6.3	HS	4
Becher	72.0	42.6	62	1.6	104	162	1.0	HS	3
R055	71.9	38.3	65	4.1	95	161	2.8	S	3
Branson	70.5	39.8	67	1.8	93	157	1.0	S	2
HY 116-SRW	70.6	47.5	72	2.8	105	161	1.0	S	1
Surge	71.6	41.2	68	0.9	88	159	6.3	MS	1
Palmer	71.9	40.0	50	1.8	98	159	3.5		
AC Morley	73.7	42.2	70	5.9	126	162	3.5	MR	7
Warthog	75.5	40.0	64	1.3	100	163	1.0	MS	7
Harvard	72.4	47.9	66	1.3	101	160	1.0	HS	7
AC Sampson	69.8	45.1	63	3.0	103	165	5.8	HS	7
Wentworth	74.0	52.0	77	2.0	106	162	4.3	HS	3
Benefit	72.1	42.4	63	2.0	122	163	1.0	S	2
Stanford	71.7	47.2	50	1.3	89	162	1.0	S	2
Princeton	74.7	49.1	58	2.4	108	162	6.0	S	1
CARNAVAL	74.3	43.5	73	1.8	105	161	1.0	MS	1
Means	71.9	44.0	64	2.0	103	161	2.4		
Locations	3	3	3	2	3	3	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 indicate relative differences.

⁴ Fusarium ratings are based on Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.

MR=moderately resistant (best); MS=moderately susceptible; S=susceptible; HS=highly susceptible (worst).

2008 ratings. 2009 ratings will be posted as soon as the information becomes available (approximately September 7th).

TABLE 6 – Ontario Winter Wheat Distributors 2009, OCCC, August 2009.

Variety	Class ¹	Distributor
Superior (TW93211)	sww	Advantage Seed Growers
AC Mackinnon (PRC9308)	sww	PRO Seeds
AC Mountain (H649.14)	sww	SeCan Association
D8006W (GENESIS-D8006W)	sww-a	Advantage Seed Growers
Ava (TW122:001)	sww	Hyland Seeds
E1009W (GENESIS:E1009)	sww	Parrish & Heimbecker Limited
Ninja (95:056:187)	sww	SeCan Association
E0028W	sww	Parrish & Heimbecker Limited
25W36 (XW05K)	sww	Pioneer Hi-Bred
25W43 (XW05J)	sww	Pioneer Hi-Bred
OTF013-081 (Ft Action)	sww	AAFC (Winter Wheat)
Vienna (CM24)	srw	C & M Seeds
FT Wonder (OTH017.033)	srw	Hyland Seeds
25R47	srw-a	Pioneer Hi-Bred
Emmit (TW044.094)	srw	Hyland Seeds
E1007R (GENESIS:E1007R)	srw-a	Parrish & Heimbecker Limited
R045 (GENESIS:R045)	srw-a	Advantage Seed Growers
Huntley (IL98.5258)	srw-a	SeCan Association
Becher (CM708)	srw	C & M Seeds
ADV Dyno (TW98617)	srw	Advantage Seed Growers
R055 (GB069R)	srw	Parrish & Heimbecker Limited
25R56 (XW04A)	srw	Pioneer Hi-Bred
Branson	srw	Hyland Seeds
25R51	srw	Pioneer Hi-Bred
Surge (R065)	srw	SeCan Association
Palmer (CM714)	srw	C & M Seeds
AC Morley (H242.31.1)	hrw	Advantage Seed Growers
Maxine (CM95009)	hrw-a	C & M Seeds
Warthog (TW025.C36)	hrw	Hyland Seeds
Harvard (CM98036)	hrw	C & M Seeds
Carlisle (CM98091)	hrw-a	C & M Seeds
AC Sampson	hrw	Bramhill Seeds
Wentworth (TW070:015)	hrw	Hyland Seeds
Benefit (95-094-197)	hrw	PRO Seeds
Stanford (ACS52062)	hrw	C & M Seeds
Princeton (ACS54037)	hrw	C & M Seeds
CARNAVAL (TW061-002)	hrw-a	Synagri

¹ sww = soft white winter, srw = soft red winter, hrw = hard red winter, a = awned.