

2011

Ontario Winter Wheat Performance Trials

Data collected 2007-2011
www.gocereals.ca



Conducted by the Ontario Cereal Crop Committee

Current as of August 29, 2011

Ontario Winter Wheat Performance Trials

This report has been prepared by the Ontario Cereal Crop Committee and contains the most recent varietal information on winter wheat that was planted in 2010 and harvested in 2011.

ADDITIONAL INFORMATION

Additional information is available at www.gocereals.ca

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**Table 1 - Ontario Winter Wheat Performance Trial Cumulative Yield Index¹
Area I & II Combined²**

Class³	Variety	5 year	4 year	3 year	2 year	2011
sww	Superior	99 ⁴	98	98	98	93
	Ava	103	103	105	105	103
	E1009W (awned)	100	98	100	101	98
	E0028W	102	101	101	100	99
	25W43					100
	Venture					105
srw	25R47 (awned)	104	103	102	102	103
	Emmit	106	106	106	107	106
	E1007R (awned)	102	101	101	101	98
	R045	104	104	103	103	102
	Huntley (awned)	100	100	99	98	97
	R055	103	103	104	104	108
	25R56	103	102	103	102	100
	Branson	106	106	107	109	112
	25R51 (awned)	100	100	97	95	95
	HY 116-SRW		104	103	104	104
	Brooklyn		102	100	101	101
	25R39			106	106	106
	Wave			106	106	104
	HY 271-SRW (awned)				98	99
	CM614				103	101
CM249 (awned)					108	
hww	Whitebear (awned)					103
hrw	AC Morley	99	99	98	97	97
	AC Sampson					94
	Wentworth	102	103	103	101	98
	Benefit					98
	Princeton		98	97	96	94
	Priesley				108	105
	Keldin (awned)			96	97	97
BROME (awned)					84	
Means (t/ha)		5.79	5.80	5.66	5.76	5.96
Means (bu/ac)		86.1	86.3	84.2	85.7	88.6
Locations		32	27	20	13	6

¹ Values differing by less than 3 within a column may not represent true differences in yield. Yield Indices are Heritability Adjusted Relative Values (HARV), which favour results from trial locations with high repeatability. For more information, see: Yan, W. Use of HARV in Variety Trial Summaries.

² Area I & II Combined = 2500 Crop Heat Units or more, West of Frontenac County.

³ sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

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 Winter Wheat Performance Trial Cumulative Yield Index¹
Area I²**

Class³	Variety	5 year	4 year	3 year	2 year	2011
sww	Superior	99 ⁴	98	98	96	96
	AC Mackinnon	101	101	100	101	97
	Ava	103	103	104	105	106
	E1009W (awned)	101	99	101	102	99
	E0028W	104	102	103	103	103
	25W43					96
	Venture					107
srw	25R47 (awned)	107	107	107	109	107
	Emmit	104	103	103	106	105
	E1007R (awned)	103	103	103	103	102
	R045	106	107	106	107	103
	Huntley (awned)	102	101	99	98	95
	R055	102	101	101	101	103
	25R56	104	101	102	103	99
	Branson	103	102	102	102	108
	25R51 (awned)	101	101	98	98	94
	HY 116-SRW		100	102	101	106
	Brooklyn		104	102	102	101
	25R39			107	107	106
	Wave			104	103	105
	HY 271-SRW (awned)				96	96
	CM614				105	106
	CM249 (awned)					107
hww	Whitebear (awned)					99
hrw	AC Morley	98	98	98	99	101
	AC Sampson					94
	Wentworth	101	102	102	100	97
	Benefit					98
	Princeton		100	97	96	93
	Priesley				105	103
	Keldin (awned)			98	99	98
	BROME (awned)					89
Means (t/ha)		5.99	6.05	6.02	5.95	5.94
Means (bu/ac)		89.1	89.9	89.5	88.5	88.3
Locations		16	12	9	6	3

¹ Values differing by less than 3 within a column may not represent true differences in yield. Yield Indices are Heritability Adjusted Relative Values (HARV), which favour results from trial locations with high repeatability. For more information, see: Yan, W. Use of HARV in Variety Trial Summaries.

² Area I = 3100 Crop Heat Units or more.

³ sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

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 Winter Wheat Performance Trial Cumulative Yield Index¹
Area II²**

Class ³	Variety	5 year	4 year	3 year	2 year	2011
sww	Superior	100 ⁴	99	98	99	90
	Ava	104	104	105	104	100
	E1009W (awned)	98	98	99	100	96
	E0028W	100	100	100	98	95
	25W43					103
	Venture					104
srw	25R47 (awned)	100	99	99	96	100
	Emmit	108	108	108	108	107
	E1007R (awned)	100	100	100	99	94
	R045	102	102	101	100	101
	Huntley (awned)	99	100	99	98	99
	R055	105	105	106	106	112
	25R56	103	103	104	102	100
	Branson	109	110	110	115	116
	25R51 (awned)	99	99	96	93	95
	HY 116-SRW		107	105	106	101
	Brooklyn		100	98	100	101
	25R39			105	105	107
	Wave			107	108	103
	HY 271-SRW (awned)				100	102
	CM614				101	97
CM249 (awned)					108	
hww	Whitebear (awned)					108
hrw	AC Morley	99	100	98	95	93
	AC Sampson	100	100	100	99	94
	Wentworth	103	103	103	103	99
	Benefit					99
	Princeton		96	96	96	96
	Priesley				110	107
	Keldin (awned)			95	95	97
BROME (awned)					78	
Means (t/ha)		5.58	5.61	5.37	5.60	5.98
Means (bu/ac)		83.0	83.4	79.9	83.2	89.0
Locations		16	15	11	7	3

¹ Values differing by less than 3 within a column may not represent true differences in yield. Yield Indices are Heritability Adjusted Relative Values (HARV), which favour results from trial locations with high repeatability. For more information, see: Yan, W. Use of HARV in Variety Trial Summaries.

² Area II = West of Frontenac County between 2500 and 3100 Crop Heat Units.

³ sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

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 Winter Wheat Performance Trial Cumulative Yield Index¹
Area III²**

Class ³	Variety	5 year	4 year	3 year	2 year	2011
sww	Superior	100 ⁴	99	97	97	98
	Ava	106	107	109	104	104
	Venture					99
srw	Emmit	107	107	108	104	108
	R045	99	99	98	101	97
	Branson	102	101	100	100	99
	HY 116-SRW		101	104	104	101
	Brooklyn		102	102	103	101
	HY 271-SRW (awned)				102	99
	CM614				104	100
CM249 (awned)					102	
hrw	AC Morley	98	97	97	97	97
	AC Sampson	101	100	101	99	100
	Wentworth	101	103	103	99	99
	Benefit	97	96	95	93	97
	Princeton		97	97	100	96
	CARNAVAL (awned)		104	105	99	104
	Keldin (awned)			102	99	94
BROME (awned)					95	
Means (t/ha)		5.38	5.56	5.98	6.11	6.30
Means (bu/ac)		80.0	82.7	89.0	90.9	93.7
Locations		14	11	8	5	2

¹ Values differing by less than 3 within a column may not represent true differences in yield. Yield Indices are Heritability Adjusted Relative Values (HARV), which favour results from trial locations with high repeatability. For more information, see: Yan, W. Use of HARV in Variety Trial Summaries.

² Area III = East of Frontenac County.

³ sww = soft white winter, srw = soft red winter, hrw = hard red winter.

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

Table 5a - Ontario Winter Wheat Varietal Characteristics - Area I

Variety	Fusarium Rating ¹	Years (fusarium Data)	Thousand					Heading Date ³ (JD)	Powdery Mildew (0-9) ²	Leaf Septoria (0-9) ²	Stem Rust (0-9) ²	
			Test Weight (kg/hL)	Protein (%)	Kernel Weight (g)	Winter Survival (%)	Lodging (0-9) ²					Height (cm)
Superior	S	10	73.8	10.6	36.3	91	1.3	94	158	1.3	2.5	1.3
AC Mackinnon	HS	10	74.5	10.9	36.3	95	2.0	90	156	1.1	2.7	1.5
Ava	MR	5	75.9	10.4	34.0	98	1.0	92	157	1.6	1.8	1.0
E1009W	S	5	74.3	11.3	36.6	100	0.5	81	158	1.1	3.7	1.3
E0028W	HS	4	72.9	11.4	38.4	95	1.6	82	156	1.3	3.8	1.8
25W43	HS	1	73.0	11.2	33.4	84	0.3	74	156	2.1	2.7	0.5
Venture	S	1	74.1	11.0	33.0	95	0.5	75	157	1.3	1.7	0.0
25R47	S	9	73.9	11.0	36.7	98	0.5	85	156	2.3	2.5	0.8
Emmit	MS	8	75.0	11.1	36.9	96	0.8	88	156	2.4	2.5	0.0
E1007R	S	7	74.9	11.5	35.8	99	0.6	85	156	2.0	2.1	1.3
R045	S	7	75.3	11.1	36.4	95	1.1	80	155	2.6	3.1	0.3
Huntley	MS	6	76.4	11.6	40.4	94	1.8	88	154	1.5	3.0	0.0
R055	S	5	75.5	11.3	34.9	90	1.3	82	156	1.3	3.3	0.3
25R56	S	5	73.4	10.3	32.1	91	0.4	79	156	2.4	2.6	0.8
Branson	S	4	75.1	11.1	36.3	95	1.3	82	154	2.0	2.9	0.3
25R51	MR	5	74.1	11.4	35.4	93	0.0	79	155	2.5	3.2	0.5
HY 116-SRW	MS	3	74.9	11.1	39.9	94	1.6	91	156	1.1	2.8	0.3
Brooklyn	S	3	75.2	10.8	37.1	89	1.0	79	156	2.9	2.8	0.5
25R39	MS	3	75.2	11.0	37.3	90	1.8	81	156	2.1	2.4	0.5
Wave	S	3	77.2	11.6	32.4	95	0.8	88	156	1.9	2.8	1.5
HY 271-SRW	MS	2	75.1	11.5	39.2	95	0.4	83	155	1.5	2.3	0.3
CM614	S	2	76.1	11.3	38.3	93	0.6	87	156	1.6	3.3	0.8
CM249	S	1	74.8	11.1	36.0	91	0.5	89	156	1.6	2.6	0.3
Whitebear	S	1	75.2	11.5	40.9	96	0.3	80	155	1.0	3.9	0.0
AC Morley	MR	10	78.1	11.9	36.9	94	1.6	106	157	1.4	2.8	0.0
AC Sampson	S	10	74.9	11.4	37.3	91	2.0	89	159	1.5	2.5	0.5
Wentworth	HS	5	77.7	11.7	43.2	99	1.5	94	157	1.9	2.8	0.8
Benefit	MS	4	78.7	11.8	38.7	98	1.3	104	157	1.5	2.5	0.3
Princeton	MS	3	77.8	11.0	40.4	95	1.4	93	157	3.0	4.3	1.3
Priesley	MS	2	72.7	10.8	38.1	93	0.0	78	157	1.3	3.2	0.0
Keldin	S	3	77.5	10.5	37.6	98	1.4	86	159	1.1	4.3	0.8
BROME	MR	1	78.7	11.6	39.7	96	1.0	105	162	1.4	3.1	0.8
Means			75.4	11.2	37.1	94	1.0	87	156	1.7	2.9	0.6
Locations			3	3	3	2	2	3	3	2	3	1

¹ 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).

² For ratings 0-9, a high score is undesirable.

³ Heading may vary from year to year and should only be used to indicate relative differences.

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits express themselves in any given year or area.

Table 5b - Ontario Winter Wheat Varietal Characteristics - Area II

Variety	Fusarium Rating ¹	Years (fusarium Data)	Thousand										
			Test Weight (kg/hL)	Protein (%)	Kernel Weight (g)	Winter Survival (%)	Lodging (0-9) ²	Height (cm)	Heading Date ³ (JD)	Powdery Mildew (0-9) ²	Leaf Rust (0-9) ²	Leaf Septoria (0-9) ²	Stem Rust (0-9) ²
Superior	S	10	76.9	11.0	43.0	90	0.5	111	164	2.5	2.5	5.4	3.3
Ava	MR	5	77.2	10.0	38.9	94	0.3	105	163	3.4	1.9	5.4	1.3
E1009W	S	5	76.2	10.3	39.5	95	0.6	92	161	2.5	2.0	6.6	3.0
E0028W	HS	4	75.2	10.5	38.7	94	0.5	92	159	1.2	1.2	6.6	3.0
25W43	HS	1	75.4	11.0	36.9	91	0.0	87	160	4.4	2.0	4.9	0.0
Venture	S	1	76.8	11.3	35.6	94	0.9	89	163	0.8	1.8	5.1	0.7
25R47	S	9	75.5	10.2	36.7	94	0.4	91	159	4.5	2.0	5.7	1.3
Emmit	MS	8	77.4	11.2	41.7	87	1.9	97	160	3.7	2.1	5.2	0.0
E1007R	S	7	77.2	10.8	37.0	95	0.0	94	160	2.8	2.4	6.0	2.0
R045	S	7	77.7	10.8	38.6	95	0.3	92	159	5.0	1.7	5.5	0.3
Huntley	MS	6	77.3	12.3	40.8	94	4.9	98	158	2.7	0.6	4.6	0.0
R055	S	5	77.4	11.3	37.8	89	1.8	91	160	1.7	1.7	5.1	0.7
25R56	S	5	74.8	10.1	33.0	81	0.4	90	160	4.8	2.4	5.3	3.3
Branson	S	4	77.7	11.0	38.2	94	0.0	92	158	1.0	1.8	4.0	0.0
25R51	MR	5	75.7	10.3	37.7	64	0.0	91	160	5.4	1.9	4.7	0.3
HY 116-SRW	MS	3	77.2	11.5	44.6	90	2.9	97	160	0.4	1.6	5.4	0.7
Brooklyn	S	3	76.1	10.9	38.4	94	0.1	92	159	4.8	1.1	5.9	0.0
25R39	MS	3	77.2	10.3	41.4	95	0.1	97	160	3.5	1.9	4.8	0.3
Wave	S	3	78.2	11.8	38.3	96	0.9	98	160	3.0	1.7	4.3	2.3
HY 271-SRW	MS	2	77.2	11.7	40.9	93	0.6	92	159	2.8	2.3	5.7	0.3
CM614	S	2	78.5	11.7	39.2	94	1.3	97	160	2.3	1.8	6.3	0.3
CM249	S	1	77.1	10.2	41.1	93	0.8	96	159	3.0	1.1	5.2	2.3
Whitebear	S	1	78.0	12.6	47.6	94	1.5	87	158	1.2	1.7	5.8	4.3
AC Morley	MR	10	78.4	12.5	41.0	95	3.1	113	163	2.3	1.4	4.4	0.7
AC Sampson	S	10	75.6	11.5	43.0	95	2.6	105	165	1.7	3.7	5.2	1.0
Wentworth	HS	5	77.9	12.3	47.0	93	0.8	96	162	4.2	1.8	5.5	0.3
Benefit	MS	4	78.7	13.2	42.8	96	0.1	109	161	2.1	2.5	4.6	0.0
Princeton	MS	3	77.2	12.2	45.0	94	0.4	102	161	4.2	1.6	5.6	2.0
Priesley	MS	2	76.9	12.0	42.2	96	0.1	90	162	1.2	1.1	5.1	0.0
Keldin	S	3	78.1	10.7	41.3	93	1.3	96	164	2.6	1.6	5.2	4.0
BROME	MR	1	77.6	10.6	40.4	94	4.5	102	166	4.0	1.0	4.3	0.7
Means			77.0	11.2	40.3	92	1.1	96	161	2.9	1.8	5.3	1.2
Locations			3	1	3	2	2	3	3	3	3	3	1

¹ 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).

² For ratings 0-9, a high score is undesirable.

³ Heading may vary from year to year and should only be used to indicate relative differences.

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits express themselves in any given year or area.

Table 5c - Ontario Winter Wheat Varietal Characteristics - Area III

Variety	Fusarium Rating ¹	Years (fusarium Data)	Thousand				Lodging (0-9) ²	Height (cm)	Heading Date ³ (JD)	Leaf Rust (0-9) ²	Straw Yield (t/ha)
			Test Weight (kg/hL)	Kernel Weight (g)	Winter Survival (%)						
Superior	S	10	78.1	39.3	92	1.5	85	160	2.8	2.55	
Ava	MR	5	79.3	34.5	94	1.0	87	160	1.5	2.85	
Venture	S	1	77.3	33.0	88	0.5	73	160	1.5	2.35	
Emmit	MS	8	79.1	37.5	92	1.0	86	159	1.3	2.50	
R045	S	7	78.8	35.8	91	0.6	77	158	1.8	1.95	
Branson	S	4	77.6	35.8	92	1.3	78	157	2.0	1.83	
HY 116-SRW	MS	3	77.2	40.8	91	1.0	82	159	1.8	2.25	
Brooklyn	S	3	79.1	36.2	90	0.5	79	158	1.8	2.05	
HY 271-SRW	MS	2	78.0	39.3	92	0.5	85	159	1.3	2.48	
CM614	S	2	79.8	38.3	87	1.0	82	159	1.8	2.45	
CM249	S	1	78.0	36.6	89	0.6	83	158	1.5	2.35	
AC Morley	MR	10	79.4	38.3	93	1.4	91	159	1.8	2.98	
AC Sampson	S	10	74.9	42.3	89	1.4	82	160	2.0	2.45	
Wentworth	HS	5	79.4	46.5	96	0.9	81	159	1.0	2.35	
Benefit	MS	4	80.1	39.6	96	1.1	90	159	1.8	3.25	
Princeton	MS	3	78.8	42.6	93	1.3	84	160	1.3	2.38	
CARNAVAL	MS	3	77.4	37.5	97	1.3	84	159	1.3	3.03	
Keldin	S	3	78.6	38.6	94	1.6	79	160	1.3	2.43	
BROME	MR	1	79.9	39.7	97	1.0	94	161	2.0	3.50	
Means			78.5	38.5	92	1.0	83	159	1.6	2.52	
Locations			2	2	2	2	2	2	1	1	

¹ 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).

² For ratings 0-9, a high score is undesirable.

³ Heading may vary from year to year and should only be used to indicate relative differences.

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits express themselves in any given year or area.

Table 6 - Ontario Winter Wheat Distributors 2011

Class¹	Variety	Distributor
sww	Superior (TW93211)	Advantage Seed Growers
	AC Mackinnon (PRC9308)	PRO Seeds
	Ava (TW122:001)	Hyland Seeds
	E1009W (GENESIS:E1009) (awned)	Parrish & Heimbecker / Southwest Ag Partners
	E0028W	Parrish & Heimbecker / Southwest Ag Partners
	25W43 (XW05J)	Pioneer Hi-Bred
	Venture (SC-08302W)	SeCan Association
srw	25R47 (awned)	Pioneer Hi-Bred
	Emmit (TW044.094)	Hyland Seeds
	E1007R (GENESIS:E1007R) (awned)	Parrish & Heimbecker / Southwest Ag Partners
	R045 (GENESIS:R045)	Advantage Seed Growers
	Huntley (IL98.5258) (awned)	SeCan Association
	R055 (GB069R)	Parrish & Heimbecker / Southwest Ag Partners
	25R56 (XW04A)	Pioneer Hi-Bred
	Branson (M00-3701)	Hyland Seeds
	25R51 (awned)	Pioneer Hi-Bred
	HY 116-SRW (WF116-072)	Hyland Seeds
	Brooklyn (CM153)	C & M Seeds
	25R39 (XW06M)	Pioneer Hi-Bred
	Wave (GB033/ R085)	SeCan Association
	HY 271-SRW (TW271*099) (awned)	Hyland Seeds
CM614 (CM8-7777)	C & M Seeds	
CM249 (CM2-9249) (awned)	C & M Seeds	
hww	Whitebear (ACS54050) (awned)	C & M Seeds
hrw	AC Morley (H242.31.1)	Advantage Seed Growers
	AC Sampson	Bramhill Seeds
	Wentworth (TW070:015)	Hyland Seeds
	Benefit (95-094-197)	PRO Seeds
	Princeton (ACS54037)	C & M Seeds
	CARNAVAL (TW061-002) (awned)	Synagri
	Priesley (SC-06215R)	C & M Seeds
	Keldin (ACS55017) (awned)	C & M Seeds
	BROME (awned)	Semican Inc

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