
2013

Ontario Winter Wheat Performance Trials

Data collected 2009-2013
www.gocereals.ca



Conducted by the Ontario Cereal Crop Committee

Current as of November 5, 2013

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 2012 and harvested in 2013.

ADDITIONAL INFORMATION

Additional information is available at www.gocereals.ca, including

- Map with area and individual locations
- Head to Head comparisons which give multi-year data
- Historical Performance reports

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**Table 1 - Ontario Performance Trial; Winter Wheat 2013 - Cumulative Yield Index¹
Summary for Area I & II Combined², OCCC, August 2013**

Class ³	Variety	5 year	4 year	3 year	2 year	2013
sww	Ava	104 ⁴	104	103	103	101
	E0028W	99	98	96	95	89
	25W43			99	99	98
	Venture			98	95	94
	AC Mackinnon					94
srw	Emmit	105	106	105	104	107
	R045	102	102	101	101	99
	PH55	103	103	104	103	103
	Branson	106	107	108	106	108
	HY 116-SRW	102	102	101	100	100
	Brooklyn	100	101	101	101	102
	25R39	105	105	105	104	97
	Wave	105	105	105	105	107
	CM614		103	103	104	103
	WB425 (awned)			106	105	106
	CM249 (awned)			108	109	108
	OAC Flight (awned)			102	101	102
	25R34 (awned)				111	113
	25R40 (awned)				110	110
Emperor				104	107	
hww	Whitebear (awned)			97	94	91
hrw	AC Morley	98	98	98	99	101
	Wentworth	100	99	98	97	99
	Princeton	98	97	97	99	99
	Keldin (awned)	98	99	100	101	97
	Priesley		105	103	103	101
	AC Sampson			94	94	93
	HY 300-HRW			97	97	95
	HY 301-HRW				99	99
	Benefit					101
Means (t/ha)		5.56	5.57	5.57	5.40	5.32
Means (bu/ac)		82.6	82.9	82.8	80.4	79.2
Locations		34	27	20	14	7

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 and II combined: see map of areas on www.gocereals.ca/variety_trial.php.

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 1a: Cumulative Yield Indices¹ of Ontario Winter Wheat Managed Performance Trials; Summary for Area 1 and 2 combined†, OCCC, August 2013.

Class	Variety	4-Year Index Fungicides		3-Year Index Fungicides		2-Year Index Fungicides		2013 Index Fungicides	
		No	Yes	No	Yes	No	Yes	No	Yes
SWW	AC Mackinnon	90	101	87	100	85	97	84	98
	Ava	92	100	92	99	91	99	89	99
	E0028W	88	103	88	104	84	102	78	99
	25W43			89	102	88	101	86	101
	Venture			88	101	82	97	81	97
SRW	25R39	96	109	94	108	92	107	86	103
	Branson	96	106	98	106	96	104	94	104
	Brooklyn	93	103	94	104	92	103	91	103
	CM614	94	104	94	105	92	105	92	105
	Emmit	95	103	94	103	93	102	94	103
	HY 116-SRW	90	99	91	100	88	97	86	99
	PH55	94	100	95	101	93	99	92	100
	R045	93	102	92	102	89	101	87	100
	Wave	94	103	96	104	94	104	94	103
	CM249			98	106	98	107	96	106
	OAC Flight			93	104	90	103	90	103
	WB425			96	103	93	101	94	100
	25R34					100	114	101	113
	25R40					100	112	98	111
	Emperor					94	102	94	101
HWW	Whitebear			84	96	80	93	78	92
HRW	AC Morley	90	93	91	94	90	95	92	98
	Keldin	89	100	90	101	89	100	86	100
	Priesley	94	103	93	103	90	101	89	101
	Princeton	88	98	88	98	87	98	88	100
	Wentworth	87	95	85	95	85	96	86	98
	Benefit			89	94	89	97	89	96
	HY 300-HRW			85	95	84	94	82	94
HY 301-HRW					87	94	88	95	
LSD (0.05)		3		3		3		4	
LSD (0.10)		2		2		3		4	
Mean (t/ha)		5.63	6.23	5.63	6.25	5.31	5.96	5.08	5.76
Mean (bu/ac)		84	93	84	93	79	89	76	86
Location-Years		17		13		9		6	

¹ Yield Indices are relative to the average yield across the untreated and fungicide treatments within each year group. Indices were not calculated using the HARV approach. Variety rankings and response vary from year to year, therefore decisions are best made using data from several years.

² SWW=soft white, SRW=soft red, HWW=hard white, HRW=hard red.

³ Treatments included a T1 application of foliar fungicide at Zadoks Growth Stage 30 to 31, followed by a T3 application of fusarium fungicide during flowering.

⁴ The LSD is a measure of variability within year group. Yield indices between varieties, or between untreated and treated, that differ less than or equal to the LSD within each year group, should be considered equal.

† Area 1 and 2: see map of areas on www.gocereals.ca/variety_trial.php.

**Table 2 - Ontario Performance Trial; Winter Wheat 2013 Cumulative Yield Index¹
Summary for Area I², OCCC, August 2013**

Class ³	Variety	5 year	4 year	3 year	2 year	2013
sww	AC Mackinnon	99 ⁴	99	96	96	95
	Ava	103	103	103	101	101
	E0028W	101	100	99	97	96
	25W43			98	100	99
	Venture			100	96	97
srw	Emmit	103	104	103	102	104
	R045	103	102	100	98	98
	PH55	102	102	103	103	103
	Branson	103	103	105	104	103
	HY 116-SRW	100	100	101	99	101
	Brooklyn	101	101	100	100	100
	25R39	108	108	108	109	101
	Wave	106	106	107	108	105
	CM614		106	107	107	107
	WB425 (awned)			104	104	97
	CM249 (awned)			110	112	111
	OAC Flight (awned)			100	99	98
	25R34 (awned)				115	112
	25R40 (awned)				113	109
	Emperor				100	98
hww	Whitebear (awned)			94	91	92
hrw	AC Morley	98	99	100	99	101
	Wentworth	100	99	97	97	101
	Princeton	98	97	96	98	104
	Keldin (awned)	99	100	100	101	101
	Priesley		104	103	103	102
	AC Sampson			93	92	93
	HY 300-HRW			95	96	94
	HY 301-HRW				101	102
	Benefit					100
Means (t/ha)		5.62	5.49	5.35	5.05	5.46
Means (bu/ac)		83.6	81.6	79.5	75.1	81.2
Locations		15	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: see map of areas on www.gocereals.ca/variety_trial.php.

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 2a: Cumulative Yield Indices¹ of Ontario Winter Wheat Managed Performance Trials; Summary for Area 1†, OCCC, August 2013.

Class ²	Variety	4-Year Index Fungicides		3-Year Index Fungicides		2-Year Index Fungicides		2013 Index Fungicides	
		No	Yes	No	Yes	No	Yes	No	Yes
SWW	AC Mackinnon	90	102	88	100	85	98	85	100
	Ava	93	98	93	97	90	95	92	98
	E0028W	92	104	92	104	88	101	87	97
	25W43			90	100	90	102	90	103
	Venture			92	105	85	98	88	99
SRW	25R39	99	112	99	110	98	110	92	104
	Branson	95	106	99	107	97	105	94	101
	Brooklyn	93	105	95	105	93	105	91	103
	CM614	97	105	99	106	97	107	99	107
	Emmit	95	104	95	103	93	103	96	104
	HY 116-SRW	91	98	95	100	91	95	92	99
	PH55	95	101	97	102	95	99	94	98
	R045	94	105	92	105	88	102	88	103
	Wave	97	106	100	108	99	108	97	105
	CM249			102	109	103	109	103	107
	OAC Flight			93	107	90	105	89	105
	WB425			91	101	89	97	88	96
	25R34					106	118	105	115
	25R40					106	117	101	112
	Emperor					92	101	91	100
HWW	Whitebear			81	93	78	89	82	93
HRW	AC Morley	92	92	94	93	92	94	95	97
	Keldin	90	101	91	101	90	99	92	101
	Priesley	95	106	95	105	91	104	94	105
	Princeton	87	96	86	95	89	96	95	101
	Wentworth	88	94	87	94	87	93	91	98
	Benefit			89	95	91	97	91	98
	HY 300-HRW			85	92	85	91	85	92
HY 301-HRW					91	97	93	99	
LSD (0.05) ⁴		3		4		4		5	
LSD (0.10)		3		3		4		4	
Mean (t/ha)		5.76	6.33	5.65	6.20	5.28	5.84	5.47	6.00
Mean (bu/ac)		86	94	84	92	79	87	81	89
Location-Years			8		6		4		3

¹ Yield Indices are relative to the average yield across the untreated and fungicide treatments within each year group. Indices were not calculated using the HARV approach. Variety rankings and response vary from year to year, therefore decisions are best made using data from several years.

² SWW=soft white, SRW=soft red, HWW=hard white, HRW=hard red.

³ Treatments included a T1 application of foliar fungicide at Zadoks Growth Stage 30 to 31, followed by a T3 application of fusarium fungicide during flowering.

⁴ The LSD is a measure of variability within year group. Yield indices between varieties, or between untreated and treated, that differ less than or equal to the LSD within each year group, should be considered equal.

† Area 1: see map of areas on www.gocereals.ca/variety_trial.php.

**Table 3 - Ontario Performance Trial; Winter Wheat 2013 Cumulative Yield Index¹
Summary for Area II², OCCC, August 2013**

Class ³	Variety	5 year	4 year	3 year	2 year	2013
sww	Ava	105 ⁴	104	103	104	102
	E0028W	97	95	94	93	84
	25W43			100	99	97
	Venture			97	95	91
	AC Mackinnon					93
srw	Emmit	107	107	106	106	110
	R045	101	101	102	102	101
	PH55	105	104	105	102	104
	Branson	109	111	110	108	112
	HY 116-SRW	103	104	101	101	99
	Brooklyn	100	101	102	102	104
	25R39	103	102	102	100	95
	Wave	105	105	103	103	108
	CM614		101	100	101	100
	WB425 (awned)			109	107	112
	CM249 (awned)			107	106	106
	OAC Flight (awned)			103	102	104
	25R34 (awned)				108	113
	25R40 (awned)				107	110
	Emperor				107	113
hww	Whitebear (awned)			99	96	90
hrw	AC Morley	98	97	97	98	101
	AC Sampson	98	97	95	95	93
	Wentworth	101	100	98	98	98
	Princeton	97	97	98	99	95
	Keldin (awned)	97	99	100	101	94
	Priesley		106	103	102	99
	HY 300-HRW			99	98	96
	HY 301-HRW				97	97
	Benefit					103
Means (t/ha)	5.50	5.64	5.76	5.67	5.22	
Means (bu/ac)	81.8	83.8	85.6	84.3	77.6	
Locations	19	15	11	8	4	

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: see map of areas on www.gocereals.ca/variety_trial.php.

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 3a: Cumulative Yield Indices¹ of Ontario Winter Wheat Managed Performance Trials; Summary for Area 2†, OCCC, August 2013.

Class	Variety	4-Year Index Fungicides		3-Year Index Fungicides		2-Year Index Fungicides		2013 Index Fungicides	
		No	Yes	No	Yes	No	Yes	No	Yes
SWW	Ava	92	102	92	102	92	102	87	101
	E0028W	85	103	84	104	80	103	70	100
	25W43			89	104	87	101	82	100
	Venture			84	97	81	95	75	95
SRW	25R39	92	106	90	106	87	105	80	103
	Branson	98	106	98	106	95	104	94	107
	Brooklyn	93	102	93	103	91	102	90	102
	CM614	90	102	90	104	88	103	85	103
	Emmit	95	102	94	104	93	102	93	103
	HY 116-SRW	90	101	88	101	86	99	80	100
	PH55	93	99	94	100	91	99	90	101
	R045	92	100	92	99	90	100	86	97
	Wave	92	101	92	101	90	100	92	100
	CM249			95	104	94	105	90	106
	OAC Flight			94	102	91	101	91	101
	WB425			100	104	98	103	99	104
	25R34					95	111	97	111
	25R40					96	108	95	111
Emperor					95	102	97	102	
HWW	Whitebear			86	99	82	96	75	91
HRW	AC Morley	89	93	89	95	89	95	90	98
	Keldin	88	99	89	101	88	101	79	99
	Priesley	94	101	92	102	89	99	84	97
	Princeton	89	99	89	101	86	100	82	99
	Wentworth	86	96	84	97	83	98	81	97
	Benefit			89	92	88	97	87	95
	HY 300-HRW					84	96	79	96
HY 301-HRW					84	92	83	91	
LSD (0.05)		4		4		5		6	
LSD (0.10)		3		4		4		5	
Mean (t/ha)		5.50	6.14	5.61	6.29	5.34	6.06	4.69	5.52
Mean (bu/ac)		82	91	83	94	79	90	70	82
Location-Years		9		7		5		3	

¹Yield Indices are relative to the average yield across the untreated and fungicide treatments within each year group. Indices were not calculated using the HARV approach. Variety rankings and response vary from year to year, therefore decisions are best made using data from several years.

²SWW=soft white, SRW=soft red, HWW=hard white, HRW=hard red.

³Treatments included a T1 application of foliar fungicide at Zadoks Growth Stage 30 to 31, followed by a T3 application of fusarium fungicide during flowering.

⁴The LSD is a measure of variability within year group. Yield indices between varieties, or between untreated and treated, that differ less than or equal to the LSD within each year group, should be considered equal.

† Area 2: see map of areas on www.gocereals.ca/variety_trial.php.

Table 4 - Ontario Performance Trial; Winter Wheat 2013 Cumulative Yield Index¹
Summary for Area III², OCCC, August 2013

Class ³	Variety	5 year	4 year	3 year	2 year	2013
sww	Ava	107 ⁴	104	104	104	108
	AC Mackinnon					100
srw	Emmit	107	104	106	105	105
	R045	98	100	99	99	93
	Branson	102	102	103	105	104
	HY 116-SRW	103	102	101	101	96
	Brooklyn	101	102	101	101	95
	CM614		104	102	103	113
	WB425 (awned)			102	103	110
	CM249 (awned)			101	101	109
	Emperor				98	98
	OAC Flight (awned)				102	91
hrw	AC Morley	96	95	95	93	102
	AC Sampson	100	99	99	98	102
	Wentworth	100	97	95	94	90
	Benefit	94	93	94	93	96
	Princeton	95	96	93	91	83
	Keldin (awned)	100	98	96	97	105
	Priesley				105	98
	HY 300-HRW			99	100	87
HY 301-HRW				96	83	
Means (t/ha)		6.24	6.42	6.65	6.80	7.04
Means (bu/ac)		92.8	95.4	98.9	101.1	104.7
Locations		12	9	6	4	1

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: see map of areas on www.gocereals.ca/variety_trial.php.

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 5a - Ontario Winter Wheat Varietal Characteristics Based on Data from Area I 2013, OCCC, August 2013

Variety	Fusarium Rating ¹	Years (fusarium Data)	Test Weight (kg/hL)	Protein (%)	Thousand Kernel Weight (g)	Winter Survival (%)	Lodging (0-9) ²	Height (cm)	Heading Date ³ (JD)	Powdery Mildew (0-9) ²
AC Mackinnon	HS	12	74.0	9.7	41.5	98	1.6	85	152	1.5
Ava	MR	7	73.9	9.1	37.2	98	1.0	87	155	1.5
E0028W	HS	6	71.0	10.3	46.2	95	1.0	76	152	1.0
25W43	S	3	73.5	10.0	39.6	98	1.4	76	153	1.9
Venture	MS	3	73.9	9.8	34.5	96	0.8	73	153	1.3
Emmit	MS	10	76.7	10.1	40.7	97	1.4	83	153	2.1
R045	S	9	77.1	10.2	36.7	98	0.0	79	152	3.9
PH55	S	7	77.0	10.4	38.0	97	1.4	77	152	1.1
Branson	S	6	78.1	10.3	37.2	95	0.8	76	151	1.0
HY 116-SRW	MS	5	75.4	10.1	43.7	95	1.4	84	152	1.0
Brooklyn	S	5	77.5	10.4	38.3	97	0.6	77	152	3.6
25R39	MS	5	75.3	9.4	40.9	96	1.4	78	153	2.6
Wave	S	5	77.7	11.1	39.6	95	1.1	84	152	1.5
CM614	MS	4	78.2	10.0	41.1	98	1.8	85	152	1.5
WB425	MS	3	78.3	10.1	36.9	98	0.0	78	152	1.0
CM249	S	3	76.9	10.4	41.6	98	0.6	83	153	1.4
25R34	MR	2	75.3	9.6	42.2	98	1.4	79	152	2.0
25R40	HS	2	76.6	10.2	42.9	97	0.5	71	153	1.0
Emperor	MS	2	76.8	10.4	39.0	96	1.3	88	152	2.4
OAC Flight	MS	3	75.1	10.2	38.5	95	0.4	80	153	1.8
Whitebear	S	3	76.0	11.3	48.8	98	0.0	75	153	1.0
AC Morley	MR	12	78.5	10.8	42.0	98	1.8	97	153	1.1
AC Sampson	S	12	73.3	10.2	38.9	97	1.6	83	156	1.4
Wentworth	HS	7	79.0	10.9	50.8	98	1.0	86	153	2.0
Benefit	MS	6	78.6	11.3	40.4	98	1.3	99	153	1.0
Princeton	MS	5	77.7	10.2	43.7	98	0.8	92	153	2.6
Priesley	MS	4	74.8	10.2	41.7	97	0.0	74	154	1.0
Keldin	S	5	76.2	10.4	45.9	98	0.3	87	155	1.3
HY 300-HRW	S	3	75.8	11.1	35.4	95	1.5	80	153	1.1
HY 301-HRW	MS	2	79.0	11.5	38.3	98	0.6	82	153	1.3
Means			76.3	10.3	40.7	97	0.9	82	153	1.6
Locations			3	1	3	3	2	3	3	2

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. See also Head to Head comparisons on GoCereals.ca website which give multi-year data for trait characteristics.

**Table 5b - Ontario Winter Wheat Varietal Characteristics Based on Data from Area II 2013,
OCCC, August 2013**

Variety	Fusarium Rating ¹	Years (fusarium Data)	Test Weight (kg/hL)	Protein (%)	Thousand 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
AC Mackinnon	HS	12	71.5	11.4	31.8	93	0.6	94	157	2.2	0.0	7.4
Ava	MR	7	75.4	10.9	32.8	90	1.4	96	159	3.8	0.3	5.8
E0028W	HS	6	71.4	12.3	34.9	94	0.1	86	157	2.2	1.0	7.9
25W43	S	3	72.6	11.7	30.3	95	0.3	79	157	4.7	0.0	5.0
Venture	MS	3	73.1	12.2	29.1	90	0.8	78	159	2.0	0.0	6.0
Emmit	MS	10	74.9	11.2	36.4	94	0.8	90	157	4.2	2.0	4.7
R045	S	9	74.7	11.2	33.9	92	0.2	81	156	5.3	2.7	4.7
PH55	S	7	75.8	11.0	31.2	92	3.8	83	157	2.7	0.0	5.0
Branson	S	6	74.5	11.0	32.5	93	2.1	81	155	2.7	0.0	3.9
HY 116-SRW	MS	5	73.9	11.8	39.5	94	2.1	93	157	1.2	0.0	5.1
Brooklyn	S	5	75.4	11.0	32.4	93	0.3	82	156	4.7	0.3	5.0
25R39	MS	5	74.0	11.4	33.8	92	2.5	85	157	5.2	0.0	5.3
Wave	S	5	76.1	12.1	34.8	90	1.9	89	157	4.3	1.3	4.1
CM614	MS	4	77.3	11.3	35.2	92	3.1	92	157	3.3	0.0	6.4
WB425	MS	3	75.8	10.8	29.6	94	0.1	86	156	1.0	0.0	3.8
CM249	S	3	75.0	10.6	37.2	91	0.3	90	158	4.2	0.0	5.4
25R34	MR	2	74.6	11.0	38.2	94	1.4	86	156	4.5	0.0	3.9
25R40	HS	2	75.0	11.2	37.1	92	0.2	75	157	2.5	0.0	4.8
Emperor	MS	2	75.4	11.0	33.0	95	2.3	96	156	5.7	0.3	5.4
OAC Flight	MS	3	73.2	11.4	33.3	93	0.2	86	157	3.7	0.3	4.7
Whitebear	S	3	74.4	12.5	41.2	89	0.1	77	156	1.2	0.0	6.9
AC Morley	MR	12	76.6	12.1	35.9	92	4.3	109	159	2.5	0.0	4.5
AC Sampson	S	12	73.1	11.9	36.2	92	0.3	95	163	2.8	0.0	5.5
Wentworth	HS	7	76.1	12.5	43.9	94	0.2	95	158	4.5	0.0	5.5
Benefit	MS	6	76.3	12.4	37.2	91	1.3	111	158	2.2	0.0	4.8
Princeton	MS	5	75.5	12.0	37.4	93	0.7	98	158	4.3	0.0	6.0
Priesley	MS	4	72.8	11.8	36.2	83	0.1	78	158	1.2	0.0	4.8
Keldin	S	5	75.3	12.2	37.2	93	0.3	88	159	3.2	0.0	5.3
HY 300-HRW	S	3	75.7	12.4	32.7	89	0.8	90	157	2.2	0.0	6.3
HY 301-HRW	MS	2	76.8	13.2	32.6	91	0.0	88	158	1.3	0.0	6.1
Means			74.7	11.6	34.9	92	1.1	89	157	3.2	0.3	5.3
Locations			4	1	4	2	3	4	4	2	1	4

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. See also Head to Head comparisons on GoCereals.ca website which give multi-year data for trait characteristics.

Table 5c - Ontario Winter Wheat Varietal Characteristics Based on Data from Area III 2013, OCCC, August 2013

Variety	Fusarium Rating ¹	Years (fusarium Data)	Test Weight (kg/hL)	Thousand Kernel Weight (g)	Winter Survival (%)	Height (cm) (cm)	Heading Date ² (JD)	Leaf Septoria (0-9) ³
AC Mackinnon	HS	12	72.5	36.1	88	87	157	1.3
Ava	MR	7	75.6	37.1	88	90	159	0.8
Emmit	MS	10	74.5	37.0	91	83	159	3.0
R045	S	9	73.5	35.6	83	75	156	1.7
Branson	S	6	73.8	35.0	90	77	155	1.0
HY 116-SRW	MS	5	72.5	37.4	83	81	157	1.8
Brooklyn	S	5	73.1	34.2	88	75	155	3.0
CM614	MS	4	75.6	38.0	88	85	156	1.5
WB425	MS	3	74.0	31.5	94	84	154	1.8
CM249	S	3	72.7	35.6	89	79	156	3.5
Emperor	MS	2	73.9	33.1	88	86	155	3.8
OAC Flight	MS	3	72.1	33.9	81	78	158	2.3
AC Morley	MR	12	77.2	38.7	90	101	161	2.0
AC Sampson	S	12	72.9	40.0	91	88	162	2.8
Wentworth	HS	7	75.0	41.8	85	82	158	3.0
Benefit	MS	6	76.9	41.5	90	105	156	3.0
Princeton	MS	5	73.6	39.1	90	86	157	1.0
Priesley	MS	4	69.7	36.4	88	73	157	2.3
Keldin	S	5	75.8	41.2	90	80	160	4.3
HY 300-HRW	S	3	74.5	35.0	88	80	157	3.3
HY 301-HRW	MS	2	73.6	31.9	87	81	159	3.0
Means			73.9	36.7	88	83	157	2.4
Locations			1	1	1	1	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 Heading may vary from year to year and should only be used to indicate relative differences.

³ For ratings 0-9, a high score is undesirable.

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. See also Head to Head comparisons on GoCereals.ca website which give multi-year data for trait characteristics.

Table 6 - Ontario Winter Wheat Yield Index and Varietal Characteristics Based on Data from Area V⁵ 2012, New Liskeard Winter Wheat Performance. OCCO, August 2012

Class ⁴	Variety	Yield Index ¹		Fusarium Rating ²	Years (fusarium Data)	Test Weight (kg/hL)	Thousand Kernel Weight (g)	Winter Survival (%)	Height (cm)	Heading Date ³ (JD)	Straw Yield Index ¹
		2 year	2012								
Sww	Ava	--	116	MR	5	72.9	36.6	100	91	162	114
	OAC Snow	77	78	--	--	74.3	41.1	60	106	162	100
SRW	Emmit	--	109	MS	8	72.8	39.9	100	83	160	96
	Branson	--	107	S	4	70.8	37.9	100	78	156	85
	HY 116-SRW	--	107	MS	3	72.2	43.8	100	89	159	102
	Brooklyn	102	103	S	3	73.4	36.5	98	75	159	95
	HY 271-SRW (awned)	--	103	MS	2	73.1	42.2	100	81	157	109
	CM614	104	101	S	2	73.7	38.9	100	84	160	94
	WB425	--	102	--	--	73.0	33.1	100	79	157	94
	CM249 (awned)	--	107	S	1	71.9	40.2	98	85	160	100
Hww	Whitebear (awned)	--	78	S	1	73.8	47.9	69	68	162	62
HRW	Wentworth	102	99	HS	5	76.1	45.3	100	89	160	105
	Princeton	105	104	MS	3	75.1	44.4	99	95	162	104
	Priesley	104	96	MS	2	72.3	42.0	92	71	162	95
	Keldin (awned)	103	106	S	3	75.9	43.4	100	84	162	103
Means		7.13 t/ha	6.76 t/ha			73.6	39.8	96	84	160	6.45
Locations		106.1	100.5								
		2	1			1	1	1	1	1	1

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-year Yield Index includes data from 2010 and 2012.

² 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).

Ratings shown are for 2011 and will be updated when 2012 data is available.

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

⁴ sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

⁵ Area V: see map of areas on

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. See also Head to Head comparisons on GoCereals.ca website which give multi-year data for trait characteristics.

Table 6a: Cumulative Yield Indices¹ of Ontario Winter Wheat Managed Performance Trials; Summary for Area 5†, OCCC, August 2013.

Class	Variety	2012 Index Fungicides	
		No	Yes
SWW	Ava	116	116
	OAC Snow	76	76
SRW	Branson	107	105
	Brooklyn	103	102
	CM249	107	104
	CM614	100	104
	Emmit	107	109
	HY 116-SRW	107	110
	HY 271-SRW	103	107
	WB425	102	103
HWW	Whitebear	76	76
HRW	HY 301-HRW	92	91
	Keldin	105	105
	Priesley	95	96
	Princeton	104	102
	HY 300-HRW	103	103
	Wentworth	99	102
LSD (0.05)		12	
LSD (0.10)		10	
Mean (t/ha)		6.76	6.79
Mean (bu/ac)		101	101
Location-Years		1	

¹ Yield Indices are relative to the average yield across the untreated and fungicide treatments within each year group. Indices were not calculated using the HARV approach. Variety rankings and response vary from year to year, therefore decisions are best made using data from several years.

² SWW=soft white, SRW=soft red, HWW=hard white, HRW=hard red.

³ Treatments included a T1 application of foliar fungicide at Zadoks Growth Stage 30 to 31, followed by a T3 application of fusarium fungicide during flowering.

⁴ The LSD is a measure of variability within year group. Yield indices between varieties, or between untreated and treated, that differ less than or equal to the LSD within each year group, should be considered equal.

† Area 5: see map of areas on www.gocereals.ca/variety_trial.php.

Table 7a - Ontario Winter Wheat Distributors 2013, OCCC, August 2013

Class¹	Variety	Distributor
sww	AC Mackinnon	PRO Seeds/Sevita International
	Ava	Hyland Seeds
	E0028W	Parrish & Heimbecker Limited
	25W43	Pioneer Hi-Bred
	Venture	SeCan Association
srw	Emmit	Hyland Seeds
	R045	Advantage Seed Growers
	PH55	Parrish & Heimbecker Limited
	Branson	Hyland Seeds
	HY 116-SRW	Hyland Seeds
	Brooklyn	C & M Seeds
	25R39	Pioneer Hi-Bred
	Wave	SeCan Association
	CM614	C & M Seeds
	WB425 (awned)	C & M Seeds
	CM249 (awned)	C & M Seeds
	25R34 (awned)	Pioneer Hi-Bred
25R40 (awned)	Pioneer Hi-Bred	
Emperor	SeCan Association	
OAC Flight (awned)	Elite Seeds	
hww	Whitebear (awned)	C & M Seeds
hrw	AC Morley	Advantage Seed Growers
	AC Sampson	Bramhill Seeds
	Wentworth	Hyland Seeds
	Benefit	PRO Seeds/Sevita International
	Princeton	C & M Seeds
	Priesley	C & M Seeds
	Keldin (awned)	C & M Seeds
	HY 300-HRW	Hyland Seeds
HY 301-HRW	Hyland Seeds	

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

Table 7b - Ontario Winter Wheat Distributor/Sponsor Contact Information 2013

Distributor	Address
Advantage Seed Growers	P.O. Box 351, Lucknow, ON, N0G 2H0 Tel: 519-440-6406 Fax: 519-812-1010 Internet: www.advantageseeds.com
Bramhill Seeds	5220 Hwy 23, RR#2, Palmerston, ON, N0G 2P0 Tel: 519-343-3630 Fax: 519-343-2037 Internet: www.bramhillseeds.com
C&M Seeds	6180 5th Line, Palmerston, ON, N0G 2P0 Tel: 1-888-733-9432 Fax: 519-343-3792 Internet: www.redwheat.com
Elite Seeds	Available through your local Agromart Tel: 519-282-6701 Internet: www.eliteseeds.ca
Hyland Seeds	P.O. Box 1090, 5 Hyland Drive Blenheim, ON, N0P 1A0 Tel: 519-676-8146 Fax: 519-676-6800 Internet: www.hylandseeds.com
Parrish and Heimbecker Ltd	23312 Dundonald Rd, Glencoe, ON, N0L 1M0 Tel: 519-287-3317
Pioneer Hi-Bred Ltd	Box 730, 7398 Queen's Line, Chatham, ON, N7M 5L1 Tel: 1-800-265-9435 Internet: www.pioneer.com
PRO Seeds of Canada/ Sevita International	595570 County Rd 59, RR6, Woodstock, ON, N4S 7W1 Tel: 1-888-537-5157 Fax: 519-533-0773 Internet: www.proseeds.ca
SeCan	400-300 Terry Fox Drive, Kanata, ON, K2K 0E3 Tel: 1-866-797-7874 Fas: 613-592-9497 Internet: www.secan.com