# 2016

## Ontario Winter Wheat Performance Trials

Data collected 2012-2016 www.gocereals.ca



**Conducted by the Ontario Cereal Crop Committee** 

Current as of September 9, 2016 (version 1)

#### **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 2015 and harvested in 2016

#### 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 Winter Wheat Performance Trial; Cumulative Yield Index<sup>1</sup> Summary for Area I & II Combined<sup>2</sup>, OCCC, August 2016

Class <sup>3</sup>	Variety	5 year	4 year	3 year	2 year	2016
SWW	Venture	89 <sup>4</sup>	86	83	79	68
	25W31 (awned)				98	94
srw	Emmit	100	99	95	93	90
	Branson	106	106	105	107	108
	Wave	102	101	98	98	99
	CM614	104	104	104	105	106
	WB425 (awned)	104	104	103	104	105
	CM249 (awned)	106	105	103	104	107
	OAC Flight (awned)	96	95	92	88	81
	25R34 (awned)	109	109	108	108	111
	25R40 (awned)	109	109	109	110	113
	HY 412-SRW	101	102	101	101	99
	Emperor	102	102	99	99	98
	Marker		104	105	105	107
	UGRC Ring (awned)		105	106	106	111
	UGRC C2-5			100	98	95
	25R46 (awned)			92	89	84
	Cruze (awned)				105	108
	DS572SRW				102	101
	25R39				109	109
	Drew (awned)					94
	Curtis					88
hrw	AC Morley	96	95	93	92	88
	AC Sampson	94	94	94	93	89
	Princeton	98	98	98	98	102
	Priesley	104	104	106	106	111
	Gallus (awned)	99	101	101	102	107
Means (t,	•	5.80	5.91	6.20	6.17	6.62
Means (b	•	86	88	92	92	98
Location-	years	30	23	16	12	7

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>4</sup> Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.



<sup>&</sup>lt;sup>2</sup> Area I and II combined: see map of areas on www.gocereals.ca/variety trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hrw = hard red winter.

Table 1a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices<sup>1</sup>, Intensive trials Summary for Area I & II Combined<sup>2</sup>, OCCC, August 2016

	_		r Index icides		ır Index gicides		r Index gicides		ir Index gicides	2016 Index Fungicides		
Class <sup>3</sup>	Variety	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
sww	Venture 25W31 (awned)	86 <sup>4</sup>	100	85	100	84	99	79 96	97 104	71 92	98 100	
srw	Emmit Branson	95 102	105 109	95 101	105 109	92 101	103 108	90 102	104 108	89 103	103 105	
	Wave CM614	97 99	104 108	97 99	102 107	95 100	100 106	95 101	101 106	98 99	102 104	
	WB425 (awned) CM249 (awned)	99 101	105 108	99 100	105 108	98 99	104 106	99 99	104 107	99 103	102 108	
	OAC Flight (awned) 25R34 (awned)	94 104	106 113	94 104	105 112	93 103	104 110	88 102	101 108	85 104	102 107	
	25R40 (awned) HY 412-SRW	105 97	113 106	104 97	112 106	104 96	109 104	104 97	109 103	106 95	107 100	
	Emperor Marker	98	106	98 100	106 109	97 102	105 109	96 101	106 108	97 103	105 108	
	UGRC Ring (awned) UGRC C2-5			100	111	102 97	110 101	102 95	109 100	107 93	109 100	
	25R46 (awned) Cruze (awned) DS572SRW							88 100 99	104 106 110	85 103 100	104 107 111	
	25R39 Drew (awned) Curtis									103 94 90	108 104 102	
hrw	AC Morley AC Sampson	93 90	100 97	93 90	101 97	92 92	98 96	92 90	98 96	88 89	90 95	
	Princeton Priesley	93 99 94	103 105	93 99	103 105	92 101	101 104	91 100	100 103	95 103	100 104	
Means (b	Gallus (awned) Means (t/ha) Means (bu/ac)		6.25 93	96 5.66 84	6.23 93	97 5.98 89	100 6.48 96	97 5.85 87	102 6.39 95	102 6.45 96	104 6.92 103	
Location-	Location-years		22		19		13		9		5	

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Fungicide 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.

The OCCC is thankful to the Grain Farmers of Ontario, BASF, Bayer and Syngenta for their financial support towards the intensive trials.



<sup>&</sup>lt;sup>2</sup> Area I and II combined: see map of areas on www.gocereals.ca/variety\_trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

<sup>&</sup>lt;sup>4</sup> 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 Index<sup>1</sup> Summary for Area I <sup>2</sup>, OCCC, August 2016

Class <sup>3</sup>	Variety	5 year	4 year	3 year	2 year	2016
SWW	Venture	914	89	86	82	70
	25W31 (awned)				101	97
srw	Emmit	98	98	95	92	88
	Branson	104	103	104	105	106
	Wave	101	98	95	95	94
	CM614	105	104	103	104	102
	WB425 (awned)	103	101	102	104	104
	CM249 (awned)	107	106	104	104	105
	OAC Flight (awned)	96	96	94	88	79
	25R34 (awned)	111	110	109	110	113
	25R40 (awned)	112	110	111	112	117
	HY 412-SRW	101	100	98	97	98
	Emperor	99	99	99	97	97
	Marker		103	104	103	107
	UGRC Ring (awned)		106	107	107	110
	UGRC C2-5			96	94	93
	25R46 (awned)			98	93	88
	Cruze (awned)				108	111
	DS572SRW				100	98
	25R39				112	112
	Drew (awned)					97
	Curtis					91
hrw	AC Morley	96	95	93	92	85
	AC Sampson	92	92	92	90	88
	Princeton	97	98	96	95	94
	Priesley	104	104	104	107	113
	Gallus (awned)	96 5.60	99	99	101	105
• •	Means (t/ha)		5.93	6.16	5.98	6.24
Means (b	•	83	88	92	89	93
Location-	Years	13	10	7	5	3

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<sup>&</sup>lt;sup>4</sup> Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.



<sup>&</sup>lt;sup>2</sup> Area I: see map of areas on www.gocereals.ca/variety trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hrw = hard red winter.

Table 2a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices<sup>1</sup>, Intensive trials Summary for Area I<sup>2</sup>, OCCC, August 2016

			r Index icides		r Index gicides		r Index gicides		r Index icides		Index
Class <sup>3</sup>	Variety	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
sww	Venture 25W31 (awned)	89 <sup>4</sup>	103	90	102	88	102	84 100	102 108	75 94	100 100
srw	Emmit	95	104	95	104	92	102	88	103	88	103
	Branson	100	107	99	105	99	106	100	107	103	105
	Wave	98	104	96	102	93	99	92	98	94	96
	CM614	100	108	100	107	98	105	99	106	95	101
	WB425 (awned)	96	104	96	104	97	106	98	107	96	100
	CM249 (awned)	103	109	102	107	100	106	99	105	101	105
	OAC Flight (awned)	95	107	94	106	94	105	87	102	78	96
	25R34 (awned)	106	115	105	113	103	110	103	111	107	106
	25R40 (awned)	107	115	105	112	105	111	105	110	110	110
	HY 412-SRW	96	104	96	103	94	100	91	99	93	99
	Emperor	95	104	94	103	94	103	91	103	94	103
	Marker			99	106	100	107	98	109	107	108
	UGRC Ring (awned)			101	108	101	109	101	110	106	106
	UGRC C2-5					92	99	88	97	87	96
	25R46 (awned)					97	108	92	107	88	106
	Cruze (awned)							101	108	105	110
	DS572SRW							96	111	93	108
	25R39									106	109
	Drew (awned)									95	110
	Curtis									93	104
hrw	AC Morley	93	99	93	99	91	98	91	99	83	87
	AC Sampson	89	95	89	96	89	95	86	95	88	96
	Princeton	92	99	94	101	91	98	89	98	87	92
	Priesley	99	105	99	105	100	104	103	105	112	109
	Gallus (awned)	92 5.61	98	94	100	95	101	95	102	102	106
	Means (t/ha)		6.14	5.74	6.27	5.91	6.44	5.54	6.12	5.61	5.99
	Means (bu/ac)		91	85	93	88	96	82	91	83	89
Location-	-Years	11		9		7		4		2	

<sup>&</sup>lt;sup>1</sup> 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.

Fungicide 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

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<sup>&</sup>lt;sup>2</sup> Area I: see map of areas on www.gocereals.ca/variety\_trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

<sup>&</sup>lt;sup>4</sup> 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 Index<sup>1</sup> Summary for Area II <sup>2</sup>, OCCC, August 2016

Class <sup>3</sup>	Variety	5 year	4 year	3 year	2 year	2016
sww	Ava	105 <sup>4</sup>	105	106	106	105
	Venture	87	84	81	77	66
	25W31 (awned)				96	91
srw	Emmit	101	100	96	94	91
	Branson	107	108	107	108	109
	Wave	102	103	101	101	102
	CM614	103	104	106	107	108
	WB425 (awned)	105	106	104	103	106
	CM249 (awned)	104	104	103	104	109
	OAC Flight (awned)	96	94	90	88	83
	25R34 (awned)	107	109	107	106	110
	25R40 (awned)	107	108	107	109	110
	HY 412-SRW	102	103	103	104	100
	Emperor	103	104	100	100	98
	Marker		106	107	106	108
	UGRC Ring (awned)		104	106	106	111
	UGRC C2-5			102	101	97
	25R46 (awned)			87	87	82
	Cruze (awned)				103	106
	DS572SRW				103	104
	25R39				107	107
	Drew (awned)					91
	Curtis					85
hrw	AC Morley	96	96	93	93	90
	AC Sampson	95	95	96	95	90
	Princeton	99	98	99	100	107
	Priesley	105	105	108	105	109
	Gallus (awned)	102	103	103	103	109
0.4 /:	HY 301-HRW	99	99	100	98	104
Means (t, Means (b	•	5.95 88	5.89 88	6.23 93	6.30 94	6.88 102
Location-		88 17	88 13	93	94 7	102 4
LOCATION-	Teals	1/	13	3	/	4

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<sup>&</sup>lt;sup>2</sup> Area II: see map of areas on www.gocereals.ca/variety\_trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hrw = hard red winter.

Table 3a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices<sup>1</sup>, Intensive Trials Summary for Area II<sup>2</sup>, OCCC, August 2016

			5-Year Index Fungicides		4-Year Index Fungicides		3-Year Index Fungicides		2-Year Index Fungicides		2016 Index Fungicides	
Class <sup>3</sup>	Variety	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
sww	Ava	101 4	109	100	109	103	109	104	108	101	105	
	Venture	83	98	81	98	80	96	75	93	69	97	
	25W31 (awned)							93	101	90	99	
srw	Emmit	95	106	95	107	93	105	91	106	90	103	
	Branson	103	110	103	111	103	110	104	109	104	105	
	Wave	97	103	98	103	97	101	98	104	100	107	
	CM614	98	107	98	108	101	106	102	107	102	107	
	WB425 (awned)	101	106	102	105	99	102	99	101	100	103	
	CM249 (awned)	99	108	98	108	98	105	99	108	104	110	
	OAC Flight (awned)	94	105	94	105	92	102	90	100	90	106	
	25R34 (awned)	102	112	103	112	102	109	100	106	103	107	
	25R40 (awned)	103	111	103	111	103	108	104	109	103	104	
	HY 412-SRW	97	108	98	108	99	107	101	107	96	101	
	Emperor	100	108	101	108	99	107	99	108	99	106	
	Marker			101	111	103	110	102	107	101	107	
	UGRC Ring (awned)			99	113	102	111	102	109	108	111	
	UGRC C2-5					101	102	101	103	97	103	
	25R46 (awned)							85	102	83	103	
	Cruze (awned)							99	104	102	105	
	DS572SRW							102	109	104	112	
	25R39									101	106	
	Drew (awned)									93	100	
	Curtis									88	101	
hrw	AC Morley	93	101	92	102	92	99	92	98	91	92	
	AC Sampson	92	98	91	97	94	96	93	97	89	95	
	Princeton	93	105	92	105	93	104	92	101	99	106	
	Priesley	99	105	99	105	101	104	97	102	97	102	
	Gallus (awned)	96 94	102	97	101	99	99	98	102	103	103	
	HY 301-HRW		96	94	96	95	95	93	97	98	99	
Means (t/		5.74	6.34	5.59	6.19	6.04	6.52	6.08	6.58	6.98	7.49	
Means (bu	· · ·	85	94	83	92	90	97	90	98	104	111	
Location-Y	'ears		12		10		7		5		3	

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<sup>&</sup>lt;sup>2</sup> Area II: see map of areas on www.gocereals.ca/variety\_trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

<sup>&</sup>lt;sup>4</sup> 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 Index<sup>1</sup> Summary for Area III <sup>2</sup>, OCCC, August 2016

Class <sup>3</sup>	Variety	5 year	4 year	3 year	2 year	2016
sww	Ava	103 <sup>4</sup>	103	103	104	104
srw	Emmit	103	103	102	103	110
	Branson	103	102	102	101	103
	CM614	106	108	108	109	114
	WB425 (awned)	99	99	97	96	88
	CM249 (awned)	102	103	103	102	103
	HY 412-SRW	102	104	102	103	102
	Emperor	97	96	96	95	96
	OAC Flight (awned)	98	95	95	95	92
	Marker		104	104	105	106
	UGRC Ring (awned)		107	107	108	113
	UGRC C2-5				105	105
	Cruze (awned)				96	91
	DS572SRW				105	111
	Drew (awned)					97
	Curtis					106
hrw	AC Morley	95	97	97	97	100
	AC Sampson	95	95	94	92	90
	Princeton	95	96	97	97	102
	Gallus (awned)	99	98	96	95	97
	Priesley	103	102	102	99	96
	HY 301-HRW	94	92	93	93	88
	Means (t/ha)		4.99	4.67	4.39	4.22
Means (b		81	74	69	65	63
Location-	Years	11	8	7	5	2

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>4</sup> Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.



<sup>&</sup>lt;sup>2</sup> Area III : see map of areas on www.gocereals.ca/variety\_trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hrw = hard red winter.

Table 5a - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area I OCCC, August 2016

Variety		um Dat	a	Test Weight	Protein	1000 Kernel	Winter Survival		Height	Heading Date <sup>3</sup>	Powdery Mildew	Leaf Septoria	Stripe Rust	Eyespot
,	Combined Fusarium Rating <sup>1</sup>	Don Rating <sup>1</sup>	Years	(kg/hL)	(%)	(g)	(%)	(0-9) <sup>2</sup>	(cm)	(DI)	(0-9) <sup>2</sup>	(0-9) <sup>2</sup>	(0-9) <sup>2</sup>	(0-9) <sup>2</sup>
Venture	S	S	5	72.6	10.4	28.7	99	2.4	74	151	1.0	1.0	7.5	2.0
25W31	MS	MS	1	76.5	11.4	29.4	97	1.4	83	152	5.5	0.0	4.1	2.0
Emmit	MS	MS	7	76.5	10.4	35.2	97	1.3	86	152	5.0	0.0	4.3	2.8
Branson	S	MS	7	76.7	10.8	35.4	95	2.8	88	148	4.5	0.0	1.3	2.3
25R39	MS	MS	6	78.1	9.9	38.1	98	3.9	86	150	5.0	1.5	0.9	2.3
Wave	S	MS	7	78.6	11.2	34.1	97	3.1	98	150	5.0	0.0	4.3	3.0
CM614	MS	MS	6	78.9	10.4	38.7	97	5.6	94	149	2.5	0.0	3.8	6.0
WB425	MS	MR	5	78.2	10.4	31.9	98	1.1	86	148	0.5	0.0	2.7	2.8
CM249	S	MS	5	76.1	10.3	36.7	98	2.9	91	149	5.0	0.5	3.5	4.5
25R34	MR	MR	4	76.4	10.1	37.3	97	2.0	85	150	5.0	3.0	1.9	2.5
25R40	HS	S	4	78.2	10.1	38.9	92	1.0	76	150	1.5	1.0	1.5	0.8
HY 412-SRW	MS	S	4	78.9	11.1	37.8	93	1.5	88	153	3.0	0.0	2.9	1.5
Emperor	MS	MR	4	78.1	10.6	35.8	98	2.6	95	148	5.0	2.0	4.8	3.3
OAC Flight	MS	MS	5	76.2	11.0	32.8	91	1.5	84	151	4.0	0.5	4.7	1.8
Marker	MR	MR	3	76.4	9.9	32.0	98	1.3	86	151	3.0	0.5	3.2	1.8
UGRC Ring	MS	MS	3	76.7	10.1	37.1	99	2.4	93	150	5.0	1.5	3.1	3.3
UGRC C2-5	MR	MR	2	73.9	10.2	37.8	96	2.9	90	153	4.0	1.5	3.7	2.5
25R46	MR	MR	2	74.8	10.0	30.7	98	0.3	80	150	5.5	0.5	6.1	1.8
Cruze	MS	MS	1	78.6	10.7	34.8	96	1.3	84	149	5.0	2.0	3.1	1.3
DS572SRW	S	S	1	77.7	10.1	38.8	94	2.0	100	151	3.0	0.0	3.8	3.0
Drew				76.2	10.7	30.0	96	1.0	88	148	3.5	0.5	4.5	1.3
Curtis				76.8	10.2	31.2	97	3.0	91	150	2.0	0.5	5.6	1.5
AC Morley	MR	MR	7	78.6	12.0	35.4	99	4.4	114	151	3.0	3.0	3.9	5.3
AC Sampson	S	S	7	75.7	11.3	37.5	93	3.0	91	153	1.5	0.5	2.9	2.3
Princeton	MS	S	7	80.1	11.3	43.9	95	3.9	101	151	6.5	4.0	1.9	5.5
Priesley	S	MS	6	77.1	10.8	40.5	97	0.6	80	152	2.0	2.0	0.8	0.3
Gallus	MS	MS	5	81.4	11.6	42.8	95	1.4	89	150	4.0	1.5	1.1	1.5
Means				77.2	10.6	35.7	96	2.2	89	150	3.7	1.0	3.4	2.5
Locations				2	2	3	1	2	2	2	1	1	3	1

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits are expressed in any given year or area. Head to Head comparisons on GoCereals.ca website give multi-year data for trait characteristics.

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



<sup>1</sup> Combined Fusarium Ratings are based on BOTH Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.
DON Ratings are based only on DON levels from inoculated provincial trials.
MR=moderately resistant (best): MS=moderately susceptible; S=susceptible; HS=highly susceptible (worst).

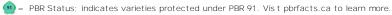
<sup>2</sup> For ratings 0-9, a high score is undesirable.

Table 5b - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area II OCCC, August 2016

						1000							
	Fusari	ium Dat	a	Test		Kernel	Winter			Heading	Powdery	Leaf	Stripe
Maniatra				Weight	Protein	Weight	Survival	Lodging	Height	Date <sup>3</sup>	Mildew	Septoria	Rust
Variety	Combined												
	Fusarium	Don	Years	(kg/hL)	(%)	(g)	(%)	$(0-9)^2$	(cm)	(JD)	$(0-9)^2$	$(0-9)^2$	$(0-9)^2$
	Rating <sup>1</sup>	Rating <sup>1</sup>											
Ava	MR	MR	7	78.3	8.7	36.3	90	0.3	101	157	3.0	5.3	3.6
Venture	S	S	5	74.5	9.7	28.4	89	0.0	78	157	0.0	7.0	6.6
25W31	MS	MS	1	78.1	10.7	30.3	90	0.0	84	157	1.8	5.0	4.8
Emmit	MS	MS	7	77.0	9.5	35.9	91	0.5	91	157	3.5	6.0	4.6
Branson	S	MS	7	77.7	9.5	37.9	91	0.8	88	154	2.5	4.5	1.1
25R39	MS	MS	6	79.1	9.3	40.8	83	1.0	87	156	3.4	4.8	0.9
Wave	S	MS	7	78.9	9.8	34.9	94	1.3	95	155	2.5	5.8	4.5
CM614	MS	MS	6	79.4	9.2	37.7	97	2.0	93	156	2.3	5.0	2.8
WB425	MS	MR	5	79.2	9.6	32.3	87	0.0	89	155	0.6	5.0	1.9
CM249	S	MS	5	77.2	9.3	39.2	94	0.8	95	155	2.6	6.0	3.2
25R34	MR	MR	4	77.7	9.3	40.0	91	0.3	87	155	3.3	4.5	1.5
25R40	HS	S	4	78.2	9.3	37.7	87	0.0	77	156	1.0	4.8	0.9
HY 412-SRW	MS	S	4	80.3	10.0	37.5	90	0.0	91	159	1.7	4.5	2.7
Emperor	MS	MR	4	77.4	9.6	32.8	97	1.8	100	155	3.4	5.5	6.1
OAC Flight	MS	MS	5	75.4	9.7	34.6	90	0.0	87	156	2.4	6.5	6.4
Marker	MR	MR	3	76.3	9.3	32.1	90	0.3	92	156	2.4	4.0	1.8
UGRC Ring	MS	MS	3	76.8	9.0	37.5	95	0.5	96	156	3.2	6.3	3.5
UGRC C2-5	MR	MR	2	76.4	9.1	40.2	85	1.8	97	159	2.2	5.5	4.0
25R46	MR	MR	2	75.4	9.6	31.6	90	1.0	83	156	2.2	6.8	5.9
Cruze	MS	MS	1	79.3	9.8	35.1	90	2.0	85	155	3.0	6.3	2.7
DS572SRW	S	S	1	78.9	9.2	42.4	97	0.3	102	156	0.0	5.3	3.4
Drew				77.8	9.8	30.1	85	0.0	86	155	1.7	6.3	4.5
Curtis				77.2	9.6	30.0	88	0.3	91	156	0.3	6.5	5.7
AC Morley	MR	MR	7	79.8	10.5	36.9	94	2.8	115	157	2.0	6.0	2.4
AC Sampson	S	S	7	76.8	10.6	39.3	86	1.0	93	160	2.9	5.3	2.4
Princeton	MS	S	7	81.0	9.9	45.5	96	0.8	104	157	4.0	4.3	1.5
Priesley	S	MS	6	78.6	10.0	42.0	90	0.0	81	156	0.0	4.3	0.6
Gallus	MS	MS	5	81.6	10.4	43.6	91	0.0	95	156	0.6	3.5	0.4
HY 301-HRW	MS	MS	4	82.2	10.6	36.6	94	0.8	92	156	1.8	5.0	0.9
Means				78.2	9.7	36.5	91	0.7	91	156	2.1	5.3	3.1
Locations				4	2	4	3	1	4	4	2	1	4

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits are expressed in any given year or area. Head to Head comparisons on GoCereals.ca website give multi-year data for trait characteristics.

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



<sup>1</sup> Combined Fusarium Ratings are based on BOTH Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.

DON Ratings are based only on DON levels from inoculated provincial trials.

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

<sup>2</sup> For ratings 0-9, a high score is undesirable.

Table 5c - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area III

OCCC, August 2016

Variety	Fusa	rium Data	l	Test Weight	Protein	1000 Kernel Weight	Winter Survival	Height	Heading Date <sup>3</sup>	Leaf Septoria
variety	Combined Fusarium Rating <sup>1</sup>	Don Rating <sup>1</sup>	Years	(kg/hL)	(%)	(g)	(%)	(cm)	(JD)	(0-9) <sup>2</sup>
Ava	MR	MR	7	75.2	11.0	31.8	80	80	158	2.7
Emmit	MS	MS	7	75.5	11.9	33.6	83	72	158	4.7
Branson	S	MS	7	75.2	12.5	33.4	77	66	155	2.7
CM614	MS	MS	6	75.6	12.2	33.6	81	74	159	4.7
WB425	MS	MR	5	76.4	13.2	30.4	77	68	156	2.3
CM249	S	MS	5	74.0	12.4	34.9	78	72	156	3.3
HY 412-SRW	MS	S	4	76.3	13.0	33.9	81	77	159	3.7
Emperor	MS	MR	4	74.9	12.1	32.7	76	80	157	3.7
OAC Flight	MS	MS	5	74.6	14.4	35.5	73	64	157	2.7
Marker	MR	MR	3	75.3	11.8	29.2	83	73	156	3.3
UGRC Ring	MS	MS	3	75.8	11.8	35.7	81	74	157	3.0
UGRC C2-5	MR	MR	2	75.3	12.3	38.0	75	75	162	3.3
Cruze	MS	MS	1	76.9	13.1	31.2	76	64	157	3.3
DS572SRW	S	S	1	76.2	12.4	40.6	78	81	158	3.7
Drew				74.9	11.7	29.0	79	65	157	2.0
Curtis				76.0	12.2	31.3	77	77	158	3.0
AC Morley	MR	MR	7	76.9	13.5	34.4	77	96	158	4.3
AC Sampson	S	S	7	73.3	14.1	35.0	79	75	163	3.0
Princeton	MS	S	7	76.5	13.2	38.7	79	77	158	2.7
Priesley	S	MS	6	71.8	13.5	35.0	79	61	158	2.7
Gallus	MS	MS	5	76.9	14.5	38.7	80	69	159	5.3
HY 301-HRW	MS	MS	4	77.0	14.6	31.5	79	68	158	4.0
Means				75.5	12.8	34.0	78	73	158	3.4
Locations				2	1	2	1	2	1	1

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits are expressed in any given year or area. Head to Head comparisons on GoCereals.ca website give multi-year data for trait characteristics.

<sup>1</sup> Combined Fusarium Ratings are based on BOTH Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.

DON Ratings are based only on DON levels from inoculated provincial trials.

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

<sup>2</sup> For ratings 0-9, a high score is undesirable.

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

<sup>91) =</sup> PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 6 - Ontario Winter Wheat Performance Trial; Cumulative Yield Index

Summary for AreaV <sup>2</sup>, OCCC, August 2016

Class <sup>3</sup>	Variety	3 year	2 year	2016
SWW	Ava	104 4	105	98
srw	CM614	97	98	98
	HY 412-SRW	107	109	114
	UGRC C2-5		98	102
	DS572SRW		105	98
	Curtis			102
hrw	Princeton	95	94	93
	Priesley	105	102	104
	Gallus (awned)	90	88	86
Means (t/	/ha)	7.99	7.99	7.52
Means (b	u/ac)	119	119	112
Location-	Years	4	3	1

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>4</sup> Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.



<sup>&</sup>lt;sup>2</sup> Area V : see map of areas on www.gocereals.ca/variety\_trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hrw = hard red winter.

Table 6a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices<sup>1</sup>, Intensive Trials Summary for Area V<sup>2</sup>, OCCC, August 2016

		3-Year Index Fungicides		2-Year Index Fungicides		2016 Index Fungicides	
Class <sup>3</sup>	Variety	No	Yes	No	Yes	No	Yes
sww	Ava	104 <sup>4</sup>	101	99	95	99	92
srw	CM614	97	99	95	97	99	99
	HY 412-SRW	106	107	108	109	114	114
	UGRC C2-5					103	103
	DS572SRW					99	96
	Curtis					103	101
hrw	Princeton	98	99	95	98	94	94
	Priesley	104	103	107	106	105	99
	Gallus (awned)	94	93	92	92	87	86
Means (t/ha)		7.35	7.40	7.77	7.84	7.52	7.37
Means (bu/ac)		109	110	116	117	112	110
Location-Years		3		2		1	

<sup>&</sup>lt;sup>1</sup> 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.

Fungicide 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.

The OCCC is thankful to the Grain Farmers of Ontario, BASF, Bayer and Syngenta for their financial support towards the intensive trials.



<sup>&</sup>lt;sup>2</sup> Area V: see map of areas on www.gocereals.ca/variety trial.php.

<sup>&</sup>lt;sup>3</sup> sww = soft white winter, srw = soft red winter, hww = hard white winter, hrw = hard red winter.

<sup>&</sup>lt;sup>4</sup> Cultivar yield rankings may vary from year to year. Decisions are therefore best made using data with the greatest number of years.

Table 6b - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area V

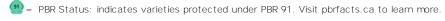
OCCC, August 2016

Variab	Fusarium Data			Test Weight	Protein	1000 Kernel Weight	Lodging	Height	Heading Date <sup>3</sup>
Variety	Combined Fusarium Rating <sup>1</sup>	Don Rating <sup>1</sup>	Years	(kg/hL)	(%)	(g)	(0-9) <sup>2</sup>	(cm)	(JD)
Ava	MR	MR	7	82.3	11.7	35.3	0.5	109	171
CM614	MS	MS	6	82.1	12.0	38.7	1.8	103	170
HY 412-SRW	MS	S	4	82.2	11.9	35.9	0.0	97	171
UGRC C2-5	MR	MR	2	79.3	11.5	39.5	0.3	106	170
DS572SRW	S	S	1	82.2	12.0	44.7	2.8	108	168
Curtis				82.3	12.2	39.5	2.5	102	168
Princeton	MS	S	7	82.8	12.9	45.2	0.0	106	170
Priesley	S	MS	6	82.2	12.4	42.5	0.0	92	173
Gallus	MS	MS	5	83.5	13.9	44.6	0.0	97	168
Means Locations				82.1 1	12.3 1	40.7 1	0.9 1	102 1	170 1

For traits not reported on this table see other area trait tables or previous year's performance trials. Not all traits are expressed in any given year or area. Head to Head comparisons on GoCereals.ca website give multi-year data for trait characteristics.

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

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



<sup>1</sup> Combined Fusarium Ratings are based on BOTH Fusarium head blight ratings and deoxynivalenol (DON) levels from inoculated provincial trials.

DON Ratings are based only on DON levels from inoculated provincial trials.

<sup>2</sup> For ratings 0-9, a high score is undesirable.

**Table 7a - Ontario Winter Wheat Distributors** 

Class <sup>3</sup>	Variety	Distributor
SWW	Ava	Dow Seeds
	Venture	SeCan Association
	25W31 (awned)	DuPont Pioneer
srw	Emmit	Dow Seeds
	Branson	Dow Seeds
	Wave	SeCan Association
	CM614	C & M Seeds
	WB425 (awned)	C & M Seeds
	CM249 (awned)	C & M Seeds
	OAC Flight (awned)	Elite Seeds
	25R34 (awned)	DuPont Pioneer
	25R40 (awned)	DuPont Pioneer
	HY 412-SRW	Dow Seeds
	Emperor	SeCan Association
	Marker	Bramhill Seeds
	UGRC Ring (awned)	Elite Seeds
	UGRC C2-5	Ridgetown Campus, U. of Guelph
	25R46 (awned)	DuPont Pioneer
	Cruze (awned)	C & M Seeds
	DS572SRW	Dow Seeds
	25R39	DuPont Pioneer
	Drew (awned)	C & M Seeds
	Curtis	SeCan Association
hrw	AC Morley	Advantage Seed Growers
	AC Sampson	Bramhill Seeds
	Princeton	C & M Seeds
	Priesley	C & M Seeds
	Gallus (awned)	C & M Seeds
	HY 301-HRW	Dow Seeds

<sup>&</sup>lt;sup>1</sup> sww = soft white winter, srw = soft red winter, hrw = hard red winter.



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

Distributor	Address				
Advantage Seed Growers	P.O. Box 351, Lucknow, ON, NOG 2H0				
	Tel: 519-440-6406 Fax: 519-812-1010				
	Internet: www.advantageseeds.com				
Bramhill Seeds	5220 Hwy 23, RR#2, Palmerston, ON, NOG 2P0				
	Tel: 519-343-3630 Fax: 519-343-2037				
	Internet: www.bramhillseeds.com				
C&M Seeds	6180 5th Line, Palmerston, ON, NOG 2P0				
	Tel: 1-888-733-9432 Fax: 519-343-3792				
	Internet: www.redwheat.com				
Dow Seeds	P.O. Box 1090, 5 Hyland Drive Blenheim, ON, NOP 1A0				
	Tel: 519-676-8146 Fax: 519-676-6800				
	Internet: www.dowseeds.com				
Elite Seeds	2405, rue de la Province, Longueuil, QC, J4G 1G3				
	Tel: 450-670-2231 Fax: 450-670-3900				
	Internet: www.eliteseeds.ca				
DuPont Pioneer	Box 730, 7398 Queen's Line, Chatham, ON, N7M 5L1				
	Tel: 1-800-265-9435				
	Internet: www.pioneer.com				
Ridgetown Campus, University of Guelph	120 Main St E, Ridgetown, ON, NOP 2C0				
	Tel: 1-877-674-1610				
	Internet: www.ridgetownc.uoguelph.ca				
SeCan Association	400-300 Terry Fox Drive, Kanata, ON, K2K 0E3				
	Tel: 1-866-797-7874 Fax: 613-592-9497				
	Internet: www.secan.com				