2018

Ontario Winter Wheat Performance Trials

Data collected 2014-2018 www.gocereals.ca



Conducted by the Ontario Cereal Crop Committee

Current as of August 27, 2018 $(version\ 1)$

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 2017 and harvested in 2018

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

For more information contact:

Ellen Sparry
Trial Coordinator
C&M Seeds
519-343-2126
esparry@redwheat.com

2018

Ontario Winter Wheat Performance Trials

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Table 1 - Ontario Winter Wheat Performance Trial; Cumulative Yield Index

Summary for Area I & II Combined², OCCC, August 2018

Class ³	Variety	5 year	4 year	3 year	2 year	2018
SWW	25W31 (awned) 🔮		96 ⁴	94	94	100
	Ava				102	101
	E0028W					105
srw	Branson	106	107	108	108	102
	Wave	97	97	97	95	101
	CM614	105	105	106	105	107
	Secord (awned)	102	103	103	101	102
	25R40 (awned)	109	110	111	110	103
	Emperor 🚇	98	97	97	96	103
	Marker	105	104	105	104	103
	UGRC Ring (awned)	105	105	106	104	101
	25R46 (awned)	91	90	88	90	100
	Cruze (awned)		102	102	99	98
	DS572SRW 🚇		102	102	102	106
	Drew (awned)			93	92	96
	B654SRW 👱			109	108	102
	B743SRW 🚇			106	104	97
	Measure (awned)				102	94
	25R61 (awned) 👰				98	104
	25R74 (awned) 📵				108	104
hrw	AC Morley	95	95	95	98	97
	Priesley	105	105	107	104	101
	Gallus (awned) 👰	101	101	103	100	96
	JDC78 (awned) 🕎			103	101	100
	Arnold (awned)				92	92
	Lexington (awned)					95
efw	Frontenac			_		105
Means (t		6.06	6.02	6.16	5.88	6.09
Means (k		90	90	92	88	91
Location	-years	29	25	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.

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² Area I and II combined: see map of areas on www.gocereals.ca website.

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

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

PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 1a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices¹, Intensive trials Summary for Area I & II Combined², OCCC, August 2018

			ar Index gicides		ar Index gicides		ar Index gicides		r Index gicides	2018 Index Fungicides	
Class ³	Variety	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
sww	Ava							96 ⁴	103	99	100
	E0028W									103	102
	25W31 (awned) 🌘			93	104	91	102	91	104	100	100
srw	Branson	102	108	103	108	104	108	104	109	104	105
	Wave	93	101	92	102	92	102	90	102	98	101
	CM614	100	106	100	107	100	107	100	108	104	105
	Secord (awned)	98	107	98	108	99	108	98	109	102	105
	25R40 (awned)	104	110	105	110	106	110	105	111	103	102
	Emperor 🚇	94	106	93	106	93	106	91	106	103	105
	Marker	101	108	100	108	101	108	100	108	103	103
	UGRC Ring (awned)	100	109	100	109	101	109	98	108	99	102
	25R46 (awned)			87	105	85	106	85	106	100	102
	Cruze (awned)			97	106	97	106	94	106	97	102
	DS572SRW 🔮			98	112	98	112	98	113	107	108
	Drew (awned)					89	104	87	104	95	98
	Measure (awned)							99	103	97	101
	B654SRW 🕛					105	110	105	111	104	107
	B743SRW 🚇					100	105	99	105	96	97
	25R61 (awned)							94	109	104	107
	25R74 (awned) 🐽							104	108	104	104
hrw	AC Morley	92	99	93	99	92	97	93	100	96	98
	Priesley	100	104	99	104	100	105	98	105	99	102
	Gallus (awned)	95	99	95	100	97	100	94	98	94	95
	JDC78 (awned)					98	105	97	106	99	101
	Arnold (awned)							88	93	93	93
	Lexington (awned)									94	95
efw	Frontenac	F 05	C 11	F 70	6.25	F 05	6.53	F 60	6.24	102	101
Means (tage of the means (b)	•	5.85 87	6.41 95	5.76 86	6.35 94	5.95 89	6.53 97	5.68 84	6.31 94	5.83 87	5.96 89
•			23		94 19		15		94 10	67	
Location	Location-years		23		13		1)		ΤO		+

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.

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

² Area I and II combined: see map of areas on www.gocereals.ca website.

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

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

Table 2 - Ontario Winter Wheat Performance Trial; Cumulative Yield Index¹
Summary for Area I², OCCC, August 2018

Class ³	Variety	5 year	4 year	3 year	2 year	2018
sww	25W31 (awned)		102 ⁴	101	103	105
	Ava				97	96
	E0028W				99	102
srw	Branson	104	104	104	104	105
	Wave	98	98	98	100	101
	CM614	103	104	103	104	103
	Secord (awned)	104	104	104	104	103
	25R40 (awned)	109	109	111	108	105
	Emperor 🕎	100	99	100	101	105
	Marker	103	103	104	103	103
	UGRC Ring (awned)	104	104	105	102	100
	25R46 (awned)	97	95	94	97	101
	Cruze (awned)		104	105	101	98
	DS572SRW 🔮		104	104	108	109
	Drew (awned)			96	96	96
	B654SRW			106	103	103
	B743SRW 🔮			103	100	96
	Measure (awned)				100	96
	25R61 (awned) 👳				101	104
	25R74 (awned) 🌘				105	105
hrw	AC Morley	94	94	92	96	97
	Priesley	102	103	104	99	99
	Gallus (awned) 👱	97	97	98	95	93
	JDC78 (awned) 🚇			107	104	102
	Arnold (awned)				92	94
	Lexington (awned)					94
efw	Frontenac					102
Means (t		6.01 89	5.91	5.98	5.85	5.41
-	Means (bu/ac)		88	89	87	81
Location-	rears	13	11	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 website

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[•]

Table 2a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices¹, Intensive trials
Summary for Area I², OCCC, August 2018

			ar Index	_	ar Index		ar Index		ar Index	2018 Index Fungicides	
Class ³	Variety	No	gicides Yes	No	gicides Yes	No	gicides Yes	No	gicides Yes	No Yes	
SWW	Ava							96 ⁴	98	97	96
	E0028W							97	104	102	101
	25W31 (awned) 🐽			100	104	99	101	101	102	103	101
srw	Branson	100	105	101	105	102	104	101	104	104	105
	Wave	96	100	96	100	97	100	98	102	100	101
	CM614	100	105	101	105	100	104	102	105	103	103
	Secord (awned)	101	106	101	105	102	105	102	105	103	104
	25R40 (awned)	105	109	105	108	107	107	106	106	104	102
	Emperor 🐽	97	104	96	105	97	105	99	105	103	104
	Marker	101	105	100	106	103	105	102	104	103	101
	UGRC Ring (awned)	101	107	101	107	102	105	100	104	100	100
	25R46 (awned)	96	106	94	105	93	104	95	104	101	102
	Cruze (awned)			100	105	101	105	100	103	98	101
	DS572SRW			101	110	102	109	105	109	107	108
	Drew (awned)					94	104	94	102	96	98
	Measure (awned)							99	100	97	100
	B654SRW 🕛					103	104	101	103	103	103
	B743SRW 🐽					99	102	98	100	97	97
	25R61 (awned) 🚇							99	107	103	105
	25R74 (awned) 🕛							103	104	104	103
hrw	AC Morley	93	98	93	98	92	95	95	98	97	99
	Priesley	99	101	100	101	101	101	97	99	99	100
	Gallus (awned) 👱	94	98	94	97	95	97	93	94	94	94
	JDC78 (awned) 🚇					104	106	102	104	102	101
	Arnold (awned)							91	91	94	94
	Lexington (awned) 🐽									95	95
	Frontenac									102	99
Means (t		5.88	6.29	5.73	6.14	5.78	6.10	5.85	6.15	5.41	5.43
Means (b		87	94	85	91	86	91	87	91	81	81
rocation-	Location-Years		12		10		8		6		3

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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.

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² Area I: see map of areas on www.gocereals.ca website.

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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
Summary for Area II ², OCCC, August 2018

Class ³	Variety	5 year	4 year	3 year	2 year	2018
SWW	Ava	106 ⁴	106	106	107	107
	25W31 (awned) 👳		92	89	87	95
	E0028W					108
srw	Branson	109	110	110	111	100
	Wave	97	96	95	91	100
	CM614	106	107	107	107	111
	Secord (awned)	101	102	103	100	100
	25R40 (awned)	109	110	111	112	102
	Emperor 🐽	96	96	94	92	101
	Marker	106	106	106	105	102
	UGRC Ring (awned)	105	106	107	105	102
	25R46 (awned)	85	85	83	84	98
	Cruze (awned)		99	100	96	98
	DS572SRW 🚇		100	100	97	104
	Drew (awned)			89	89	96
	B654SRW 🕎			110	111	101
	B743SRW 🕎			108	108	97
	Measure (awned)				104	92
	25R61 (awned) 🕛				96	104
	25R74 (awned) 🕛				112	104
hrw	AC Morley	96	96	96	100	98
	Princeton	101	101	104	102	103
	Priesley	108	107	109	109	104
	Gallus (awned) 👳	104	104	106	105	100
	JDC78 (awned) 🚇			100	99	97
	Arnold (awned)				92	90
	Lexington (awned)					96
efw	Frontenac					107
Means (t	•	6.09 91	6.10	6.29	5.91	6.76
	Means (bu/ac)		91	94	88	101
Location-	Years	16	14	11	7	3

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



² Area II: see map of areas on www.gocereals.ca website.

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

Table 3a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices¹, Intensive Trials
Summary for Area II ², OCCC, August 2018

			r Index sicides	_	ar Index gicides		ar Index gicides		r Index gicides	2018 Index Fungicides	
Class ³	Variety	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
sww	Ava	1014	109	101	109	99	108	97	111	106	111
	E0028W									103	105
	25W31 (awned) 🕛			85	103	82	103	75	106	92	98
srw	Branson	104	112	105	112	105	112	107	116	103	106
	Wave	91	101	89	103	87	104	77	102	92	101
	CM614	100	108	99	109	99	110	96	112	109	112
	Secord (awned)	96	109	95	111	96	112	91	114	100	107
	25R40 (awned)	103	112	105	113	104	113	105	119	99	102
	Emperor	92	107	91	107	88	107	80	107	105	108
	Marker	101	112	100	110	99	111	98	114	104	110
	UGRC Ring (awned)	99	112	99	111	100	113	95	114	96	108
	25R46 (awned)			79	106	76	107	71	111	96	101
	Cruze (awned)			94	107	93	108	86	110	94	104
	DS572SRW 🖑			95	113	94	116	87	119	105	109
	Drew (awned)					84	104	77	108	93	95
	Measure (awned)							101	107	97	102
	B654SRW 🔮					107	116	110	121	108	117
	B743SRW 🕛					101	108	101	112	92	98
	25R61 (awned) 🕛							86	112	105	113
	25R74 (awned) 🌘							107	114	104	105
hrw	AC Morley	92	101	92	100	91	99	92	104	92	96
	Princeton	93	105	92	104	95	106	92	107	91	105
	Priesley	101	108	98	107	99	108	100	114	99	107
	Gallus (awned) 🕎	97	101	97	103	98	103	95	103	95	99
	JDC78 (awned) 盟					92	105	89	109	91	100
	Arnold (awned)							84	95	88	91
	Lexington (awned)									92	94
efw	Frontenac	5.82								102	106
•	Means (t/ha)		6.53	5.79	6.57	6.13	6.98	5.43	6.56	7.07	7.53
	Means (bu/ac)		97	86	98	91	104	81	98	105	112
Location	Location-Years		11		9		7		4		1

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² Area II: see map of areas on www.gocereals.ca website.

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

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

Table 4 - Ontario Winter Wheat Performance Trial; Cumulative Yield Index

Summary for Area III 2, OCCC, August 2018

Class ³	Variety	5 year	4 year	3 year	2 year	2018
SWW	Ava	102 4	102	102	101	105
srw	Branson	103	103	104	105	101
	CM614	104	104	104	100	103
	Secord (awned)	103	102	103	103	103
	Emperor 📵	97	97	98	99	100
	Marker	104	104	104	103	103
	UGRC Ring (awned)	105	106	106	103	101
	DS572SRW 🐽		104	105	103	104
	Drew (awned)			100	101	101
	B654SRW 🌘			106	108	105
	B743SRW 🚇			99	96	92
	Measure (awned)				98	96
hrw	AC Morley	94	94	93	90	91
	Princeton	98	98	99	98	104
	Priesley	102	101	100	102	106
	Gallus (awned) 🐽	98	98	100	101	99
	JDC78 (awned) 🜘			97	101	99
	Lexington (awned)					100
efw	Frontenac					103
, .	Means (t/ha)		5.74	6.17	7.06	7.27
•	Means (bu/ac)		85	92	105	108
Location-	Years	12	10	7	5	3

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



² Area III: see map of areas on www.gocereals.ca website.

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

Table 4a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices ¹, Intensive Summary for Area III ², OCCC, August 2018

			' Index gicides
Class ³	Variety	No	Yes
SWW	Ava	87 ⁴	102
	25W31 (awned) 🏚	98	101
srw	Emmit	105	113
	Branson	106	112
	CM614	76	91
	WB425 (awned) 🍙	97	118
	Secord (awned)	95	102
	25R34 (awned)	92	106
	25R40 (awned)	99	112
	HY 412-SRW	96	104
	Emperor OAC Flight (awned)	97 101	104 103
	Marker UGRC Ring (awned)	105 102	109 111
	25R46 (awned)	104	110
	Cruze (awned)	108	108
	DS572SRW 🙍	108	104
	Drew (awned)	98	103
	UGRC GL164	105	110
	Measure (awned)	97	97
	B654SRW	103 93	112 106
	25R61 (awned) 🙆	105	113
	25R74 (awned) 🍙	109	104
hrw	AC Morley	89	88
	AC Sampson	81	102
	Princeton	84	108
	Priesley	88	100
	Gallus (awned) 🐵	99	103
	HY 301-HRW 🚳	92	95
	JDC78 (awned) 🙆	97	104
	Arnold (awned)	49	55
Means (t/ha) Means (bu/ac) Location-Years		6.74 100	7.28 108 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.

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² Area II: see map of areas on www.gocereals.ca website.

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[👰] PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 5a - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area I OCCC, August 2018

	Fusar	ium Dat	a	Test Weight	Protein	1000 Kernel Weight	Winter Survival	Lodging	Height	Heading Date ³	Maturity Date
Variety	Combined Fusarium Rating ¹	Don Rating ¹	Years	(kg/hL)	(%)	(g)	(%)	(0-9) ²	(cm)	(JD)	(JD)
Ava	MR	MR	9	77.2	11.5	32.7	100	0.0	86	153	189
E0028W	HS	HS	8	75.3	11.9	38.1	100	0.4	75	151	188
25W31 🕛	MS	S	3	79.4	13.0	28.2	100	0.0	74	152	190
Branson	S	MS	9	76.0	11.8	32.0	100	0.9	75	150	187
Wave	S	MS	9	78.7	12.6	32.6	100	0.3	83	151	187
CM614	MS	MS	8	78.6	11.9	34.8	100	1.4	78	151	188
Secord	S	MS	7	77.4	12.2	34.3	100	0.5	79	151	190
25R40	S	S	6	76.5	11.9	33.5	100	0.3	68	151	190
Emperor	MS	MR	6	76.7	12.1	33.6	100	1.3	84	150	187
Marker	MR	MR	5	75.6	11.5	28.5	100	0.0	76	152	188
UGRC Ring 🐽	MS	MR	5	76.5	12.1	34.5	95	0.0	76	150	190
25R46	MS	MS	4	78.3	12.4	32.0	100	0.0	71	151	190
Cruze	MS	MR	3	79.0	12.3	32.0	100	0.3	70	150	188
DS572SRW 🔮	S	HS	3	80.0	11.8	39.8	100	0.8	87	152	187
Drew	MS	MR	2	78.3	12.4	29.8	100	0.0	72	150	190
Measure	MS	MR	1	77.0	12.5	34.0	100	0.9	77	151	187
B654SRW 🐽	S	S	2	76.7	10.9	33.6	100	2.8	83	151	184
B743SRW 👱	MS	MS	2	78.8	12.7	33.8	100	1.9	81	153	188
25R61 🔮	MR	MR	1	76.0	12.3	30.2	100	0.0	77	150	190
25R74 🕛	MR	MR	1	77.1	12.4	28.1	93	0.0	70	150	190
AC Morley	MR	MR	9	79.0	13.2	34.4	100	1.4	93	152	187
Priesley	S	MS	8	75.3	12.3	36.2	100	0.0	71	152	189
Gallus 🐽	MS	S	7	79.9	13.3	38.4	100	0.0	75	151	190
JDC78 🐽	S	S	2	77.3	12.8	34.4	100	0.9	70	152	190
Arnold	MS	MR	1	82.1	14.9	38.1	100	0.0	81	153	191
Lexington 🐽				80.4	13.8	40.6	100	1.0	77	152	187
Frontenac				79.0	12.9	37.3	100	0.8	89	151	191
Means				77.9	12.4	33.9	100	0.6	78	151	189
Locations				3	3	3	1	2	3	2	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.

¹ 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).

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

 $^{{\}tt 3}$ Heading may vary from year to year and should only be used to indicate relative differences.

n= PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 5b - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area II OCCC, August 2018

Variety		ium Dat	a	Test Weight	Protein	1000 Kernel Weight	Winter Survival	Lodging	Height	Heading Date ³	Powdery Mildew	Leaf Rust	Stripe Rust	Maturity Date
variety	Combined Fusarium Rating ¹	Don Rating ¹	Years	(kg/hL)	(%)	(g)	(%)	(0-9) ²	(cm)	(JD)	(0-9) ²	(0-9) ²	(0-9) ²	(JD)
Ava	MR	MR	9	75.6	10.5	37.6	97	3.3	93	161	4.3	0.0	2.0	202
E0028W	HS	HS	8	73.8	10.5	42.9	97	5.0	80	159	3.3	1.0	0.5	195
25W31 👰	MS	S	3	75.6	11.8	33.1	95	1.5	74	160	4.5	0.3	0.0	199
Branson	S	MS	9	74.4	10.7	36.7	94	6.0	79	157	4.0	0.0	0.0	195
Wave	S	MS	9	76.8	11.9	36.0	98	2.5	88	160	1.3	0.0	0.0	195
CM614	MS	MS	8	76.7	10.5	41.3	98	5.0	85	158	3.5	0.3	0.5	199
Secord	S	MS	7	74.8	10.8	38.6	100	3.0	82	158	1.5	0.0	0.0	195
25R40	S	S	6	75.0	9.8	40.1	96	2.0	70	159	1.2	0.0	1.5	197
Emperor 📵	MS	MR	6	77.3	11.1	36.2	97	5.8	89	158	4.7	1.3	2.5	199
Marker	MR	MR	5	74.9	10.3	32.4	94	3.0	80	159	1.5	0.3	0.0	199
UGRC Ring	MS	MR	5	74.3	11.0	37.9	95	3.5	82	158	3.8	0.0	1.5	197
25R46	MS	MS	4	74.0	10.5	35.8	97	2.0	76	158	4.7	0.0	0.5	198
Cruze	MS	MR	3	77.1	11.0	36.1	95	2.8	72	158	4.8	0.0	1.5	198
DS572SRW 🜚	S	HS	3	78.0	10.8	46.5	93	3.5	91	160	0.8	1.0	2.0	201
Drew	MS	MR	2	75.3	11.5	33.2	90	1.5	73	158	1.5	0.3	1.0	197
Measure	MS	MR	1	77.0	11.5	40.7	92	7.0	84	158	1.7	0.3	0.0	197
B654SRW	S	S	2	75.1	9.9	41.5	99	7.5	90	159	4.5	0.0	0.0	195
B743SRW 🚇	MS	MS	2	76.8	11.1	36.3	92	5.5	87	162	3.7	0.0	0.0	200
25R61	MR	MR	1	74.0	10.7	34.9	99	1.5	84	158	5.5	0.0	0.0	194
25R74 🙆	MR	MR	1	75.6	11.1	35.0	94	2.3	72	158	1.5	0.0	0.0	200
AC Morley	MR	MR	9	78.5	11.9	38.3	99	5.3	102	162	0.8	0.0	0.0	196
Princeton	S	S	9	77.8	11.3	45.3	99	4.3	88	160	2.2	0.0	0.0	195
Priesley	S	MS	8	75.2	11.3	43.8	99	2.0	77	160	1.7	0.0	0.5	202
Gallus 🙍	MS	S	7	78.9	12.2	46.4	98	1.3	86	161	1.0	0.0	0.0	198
JDC78 🕙	S	S	2	75.5	11.7	39.8	92	2.3	72	160	2.7	0.0	0.0	203
Arnold	MS	MR	1	79.4	13.6	39.0	95	1.3	87	160	1.0	0.0	1.5	200
Lexington 👩				78.9	11.9	47.3	96	4.0	80	161	3.0	0.0	0.0	197
Frontenac				77.8	11.7	42.9	98	2.8	97	159	1.0	0.0	0.0	195
Means				76.2	11.2	39.1	96	3.5	83	159	2.7	0.2	0.6	198
Locations				3	1	3	2	1	3	3	2	1	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.

 ${\sf MR=} moderately\ resistant\ (best);\ {\sf MS=} moderately\ susceptible;\ {\sf S=} susceptible;\ {\sf HS=} highly\ susceptible\ (worst).$

¹ 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.

 $^{{\}bf 2}$ 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.

^{🌘 =} PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 5c - Ontario Winter Wheat Performance Trials; Varietal Characteristics Based on Data from Area III OCCC, August 2018

Variety	Fusa	rium Data	١	Test Weight	Protein	1000 Kernel Weight	Winter Survival	Lodging	Height	Heading Date ³	Leaf Septoria	Straw Yield Index
variety	Combined Fusarium Rating ¹	Don Rating ¹	Years	(kg/hL)	(%)	(g)	(%)	(0-9) ²	(cm)	(DI)	(0-9) ²	
Ava	MR	MR	9	72.9	7.8	36.1	91	1.4	98	157	3.9	110
Branson	S	MS	9	73.1	8.3	34.4	90	2.5	84	154	4.4	92
CM614	MS	MS	8	74.0	8.6	37.3	87	1.4	89	156	4.6	107
Secord	S	MS	7	70.6	8.7	37.3	87	0.4	85	157	4.5	105
Emperor 👰	MS	MR	6	73.2	9.1	34.9	88	1.1	96	154	3.8	110
Marker	MR	MR	5	72.4	8.4	31.2	88	1.6	86	155	4.3	96
UGRC Ring	MS	MR	5	65.9	8.6	36.6	85	0.6	90	156	4.1	90
DS572SRW 🙆	S	HS	3	74.5	8.7	45.3	83	0.8	98	156	4.4	91
Drew	MS	MR	2	73.1	9.0	32.7	90	0.3	79	156	5.1	85
Measure	MS	MR	1	73.6	9.2	38.7	86	2.9	89	155	5.0	87
B654SRW 👰	S	S	2	73.1	8.1	37.7	92	1.4	95	156	4.1	105
B743SRW 👰	MS	MS	2	74.1	9.7	35.5	82	2.0	95	156	3.9	81
AC Morley	MR	MR	9	74.5	10.2	38.3	89	1.9	111	157	3.7	140
Princeton	S	S	9	74.0	9.3	43.4	90	0.5	100	157	5.0	118
Priesley	S	MS	8	72.7	9.9	41.2	94	0.0	80	156	4.5	103
Gallus 👰	MS	S	7	75.3	10.0	43.7	90	0.1	87	156	4.1	79
JDC78 🙆	S	S	2	72.5	9.5	39.1	90	1.0	76	156	4.8	89
Lexington 🕙				75.8	10.6	43.9	93	0.5	88	156	4.4	111
Frontenac				75.6	8.8	43.6	91	0.5	102	156	4.9	102
Means				73.2	9.1	38.5	89	1.1	91	156	4.4	2.49 t/ha
Locations				3	1	3	2	2	3	1	2	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.

¹ 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).

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.

p= PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 6 - Ontario Winter Wheat Performance Trial; Cumulative Yield Index¹ Summary for AreaV ², OCCC, August 2018 ⁵

Class ³	Variety	2018
srw	CM614	98 ⁴
	Marker	116
	Cruze (awned)	102
	Drew (awned)	66
hrw	Princeton	105
	Priesley	106
	AC Morley	116
	JDC78 (awned) 🐽	65
	Lexington (awned) 🌘	74
efw	Frontenac	115
Means (t/ha)		3.15
Means (bu/ac)		47
Location-Years		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.

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



² Area V: see map of areas on www.gocereals.ca/variety_trial.php (2018 location is Emo).

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

Table 6a - Ontario Winter Wheat Performance Trial - Cumulative Yield Indices¹,
Intensive Trials Summary for Area V², OCCC, August 2018 ⁵

		2-Year Index Fungicides		2016 Index Fungicides	
Class ³	Variety	No	Yes	No	Yes
sww	Ava	99⁴	95	99	92
srw	CM614	95	97	99	99
	HY 412-SRW 🐽	108	109	114	114
	UGRC C2-5			103	103
	DS572SRW 🐽			99	96
	UGRC GL164			109	106
	B654SRW 🚇			97	101
	B743SRW 🚇			99	97
	Curtis 🕛			103	101
hrw	Princeton	95	98	94	94
	Priesley	107	106	105	99
	Gallus (awned) 🏩	92	92	87	86
Means (t/ha)		7.77	7.84	7.52	7.37
Means (bu/ac)		116	117	112	110
Location-Years		2		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.

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 thanks the Grain Farmers of Ontario, BASF, Bayer and Syngenta for their financial support towards the intensive trials.



² Area V: see map of areas on www.gocereals.ca/variety trial.php.

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

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

⁵ Data for 2016 presented as 2017-2018 trials did not survive.

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

OCCC, August 2018 4

	Fusarium Data		Test Weight	1000 Kernel Weight	Height	
Variety	Combined Fusarium Rating ¹	Don Rating ¹	Years	(kg/hL)	(g)	(cm)
CM614	MS	MS	8	69.0	34.8	79
Marker	MR	MR	5	71.5	28.4	77
Cruze	MS	MR	3	73.2	32.1	71
Drew	MS	MR	2	69.8	31.6	72
AC Morley	MR	MR	9	73.2	37.6	102
Princeton	S	S	9	69.8	40.8	84
Priesley	S	MS	8	69.4	36.4	76
JDC78 📵	S	S	2	69.8	35.1	67
Lexington 👳				71.1	37.4	75
Frontenac				73.2	38.6	87
Means				71.0	35.3	79
Locations				1	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.

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).

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



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

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

Table 7a - Ontario Winter Wheat Distributors 2018

Class ³	Variety	Distributor	
SWW	Ava	Brevant	
	E0028W	SeCan Association	
	25W31 (awned) 👱	Pioneer Hi-Bred	
srw	Branson	Brevant	
	Wave	SeCan Association	
	CM614	C & M Seeds	
	Secord (awned)	SeCan Association	
	25R40 (awned)	Pioneer Hi-Bred	
	Emperor 🐽	SeCan Association	
	Marker	Bramhill Seeds	
	UGRC Ring (awned)	Elite Seeds	
	25R46 (awned)	Pioneer Hi-Bred	
	Cruze (awned)	C & M Seeds	
	DS572SRW	Brevant	
	Drew (awned)	C & M Seeds	
	Measure (awned)	Bramhill Seeds	
	B654SRW 🚇	Brevant	
	B743SRW 🐽	Brevant	
	25R61 (awned) 🐽	Pioneer Hi-Bred	
	25R74 (awned) 🐽	Pioneer Hi-Bred	
hrw	AC Morley	Advantage Seed Growers	
	Princeton	C & M Seeds	
	Priesley	C & M Seeds	
	Gallus (awned) 🚇	C & M Seeds	
	JDC78 (awned) 밀	C & M Seeds	
	Arnold (awned)	C & M Seeds	
	Lexington (awned)	C & M Seeds	
efw	Frontenac	Semican Inc	

¹ sww = soft white winter, srw = soft red winter, hrw = hard red winter, efw = eastern feed winter.

e PBR Status; indicates varieties protected under PBR 91. Visit pbrfacts.ca to learn more.

Table 7b - Ontario Winter Wheat Distributor/Sponsor Contact

Distributor	Address
Advantage Seed Growers	P.O. Box 351, Lucknow, ON, N0G 2H0 Tel: 519-440-6406 Fax: 519-812-1010 Website: 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
Brevant Seeds	Suite 2400, 215-2nd St, SW, Calgary, AB T2P 1M4 Tel: 519-359-3934 Website: www.engage.brevant.com/en-ca
C&M Seeds	6180 5th Line, Palmerston, ON, N0G 2P0 Tel: 1-888-733-9432 Fax: 519-343-3792 Website: www.redwheat.com
Elite Seeds	Available through your local Agromart Tel: 519-282-6701 Website: www.eliteseeds.ca
Pioneer Hi-Bred	Box 730, 7398 Queen's Line, Chatham, ON, N7M 5L1 Tel: 1-800-265-9435 Website: www.pioneer.com
SeCan Association	400-300 Terry Fox Drive, Kanata, ON, K2K 0E3 Tel: 1-866-797-7874 Fax: 613-592-9497 Website: www.secan.com
Semican Inc	366, Rang 10, Plessisville, QC, G6L 2Y2 Tel: 1-866-362-3385 Fax: 819-362-3385 Website: www.semican.ca