

## **Fresh off the Field – 2016 MCVET Winter Cereal Yield Data**

In Manitoba, interest in fall rye is increasing with 112,000 acres seeded the fall of 2015. Although winter wheat acres have declined in recent years, there are still very strong economic and agronomic arguments to be made to include winter wheat in rotation.

There are a number of newer winter wheat and fall rye varieties, including hybrid fall rye. Producers should take the time to evaluate their attributes, using available data and speaking with extension professionals, agronomists and local seed growers. It is the seed growers who see varieties first hand and can provide input to help with variety decisions.

Since 2008, MCVET (Manitoba Crop Variety Evaluation Team) has been publishing winter cereal data shortly after harvest in an effort to assist producers with variety decisions. In 2016, yield data is being published for five fall rye varieties and seven winter wheat varieties collected at ten sites across Manitoba.

**2016 Multi-site yield data.** Data in the Winter Wheat and Fall Rye Yield Comparisons tables allows producers to make head to head comparisons between varieties at each site, using the statistical information provided in the grey shaded area located at the bottom of the table.

The first step will be to look at the "Sign Diff" value — a "yes" or "no" will indicate if a real difference exists between varieties. For example, for fall rye at the Hamiota site there are significant differences between the five varieties tested.

The second step is to look at the "LSD" value. LSD stands for Least Significant Difference and it shows the number of bushels per acre that individual varieties must differ by to be considered significantly different. For example, if comparing fall rye varieties at the Hamiota site the varieties must differ by more than 8 bushels per acre. If we compare Hazlet and Brasetto, we see Brasetto yielded significantly higher at this site in 2016.

While it is tempting to only look at data from single sites, individual site data and even data accumulated over several sites in a single year must always be viewed with caution. Ideally, producers should look at yield data collected over many years and locations (long term yield data) in combination with the multi-site yearly data and select those varieties that perform well not only in their area but across locations and years.

***It's not just about yield!*** Although yield is generally the first information producers look at, variety characteristics such as maturity, height, standability and disease resistance are critical to maximizing yield potential, end quality and therefore economic returns. Consider 2016 when stripe rust appeared early in the season in winter wheat, a repeat of 2015. Or fusarium head blight which can impact yield and quality of winter wheat in any given year. Selecting a variety with a strong disease package is one of the keys to maximizing yield and quality.

Refer to Seed Manitoba 2016 at [www.seedmb.ca](http://www.seedmb.ca) to review all the variety descriptions, including agronomic attributes and disease resistance ratings, for winter wheat and fall rye. Also remember the importance of marketing opportunities and potential end uses such as milling, brewing or feed/ethanol when selecting a variety.

**Wheat Class Modernization impacts winter wheat varieties.** Effective August 1, 2016 the new Canada Western Special Purpose (CWSP) class came into effect, along with the termination of the Canada Western General Purpose (CWGP) class. This impacted the designation of several winter wheat varieties. Producers need to be aware of these changes in order to declare that the winter wheat delivery they are making is eligible for a specific western Canadian wheat class. The Canadian Grain Commission's Variety Designation Lists, available on their website, helps producers identify which varieties are eligible for each class.

**SEED MANITOBA 2017.** The SEED MANITOBA guide will continue to provide the latest unbiased information on post-registration variety performance in Manitoba. SEED MANITOBA is a collaborative effort between the Manitoba Seed Growers' Association, Manitoba Agriculture and the Manitoba Co-operator. Look for SEED MANITOBA 2017 in December – it will contain 2016 winter wheat protein data for the ten sites, as well as updated long term yield data for winter wheat and fall rye.

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*The early release of MCVET winter cereal yield data would not have been possible without:*

- *Patti Rothenburger - MCVET Coordinator, Craig Linde, and Anita Brule-Babel for coordinating data collection, statistical analysis, and reviewing of data.*
- *MCVET Winter Cereal site contractors.*
- *MCVET sponsors and supporters, including Winter Cereals Manitoba Inc., who provides funding for post-registration winter wheat variety testing.*

Winter Wheat Yield Comparisons Table

Class/Variety	2016 Average Yield (bu/acre)	2016 Yield (bu/ac)									
		Arborg	Beausejour	Boissevain	Carberry	Carman	Hamiota	Roblin	Rosebank	Stonewall	Winnipeg
<b>Canada Western Red Winter</b>											
AAC Elevate	87	104	118	73	60	76	77	58	102	111	94
AAC Gateway	94	110	117	75	71	84	83	84	102	113	102
CDC Chase	95	111	111	73	68	74	87	88	108	120	115
Emerson	94	98	105	78	91	77	89	89	104	109	100
<b>Canada Western Special Purpose</b>											
CDC Falcon	88	103	113	66	58	77	79	60	98	111	117
<b>Varieties supported for registration, with class designation to be determined by Canadian Grain Commission</b>											
1303-132-2	107	118	136	79	76	90	92	105	111	133	127
W520	100	110	125	76	70	88	87	99	110	119	116
<b>SITE GRAND MEAN (bu/acre)</b>		108	118	74	71	81	85	83	105	116	110
CV%		3.7	4.1	5.0	5.2	9.2	4.0	6.5	3.5	4.6	7.9
LSD (bu/acre)		7	9	7	7	11	6	10	7	10	13
Sign Diff		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Fall Rye Yield Comparisons Table

Type/Variety	2016 Average Yield (bu/acre)	2016 Yield (bu/ac)									
		Arborg	Beausejour	Boissevain	Carberry	Carman	Hamiota	Roblin	Rosebank	Stonewall	Winnipeg
Hazlet	110	118	135	69	120	98	99	121	119	124	96
Danko	107	122	130	65	125	96	92	128	125	108	74
<b>Hybrid Fall Rye</b>											
Bono	132	151	152	93	150	137	114	146	150	137	90
Brasetto	134	145	164	86	143	133	118	155	145	141	105
Guttino	133	156	155	82	150	132	117	144	151	142	101
<b>SITE GRAND MEAN (bu/acre)</b>		139	147	79	138	119	108	139	138	131	93
CV%		10.5	4.3	11.5	2.1	5.3	3.8	13.0	7.0	7.5	8.7
LSD (bu/acre)		28	12	17	6	10	8	-	19	18	15
Sign Diff		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes