A3868

Wisconsin Winter Wheat Performance Tests

2014

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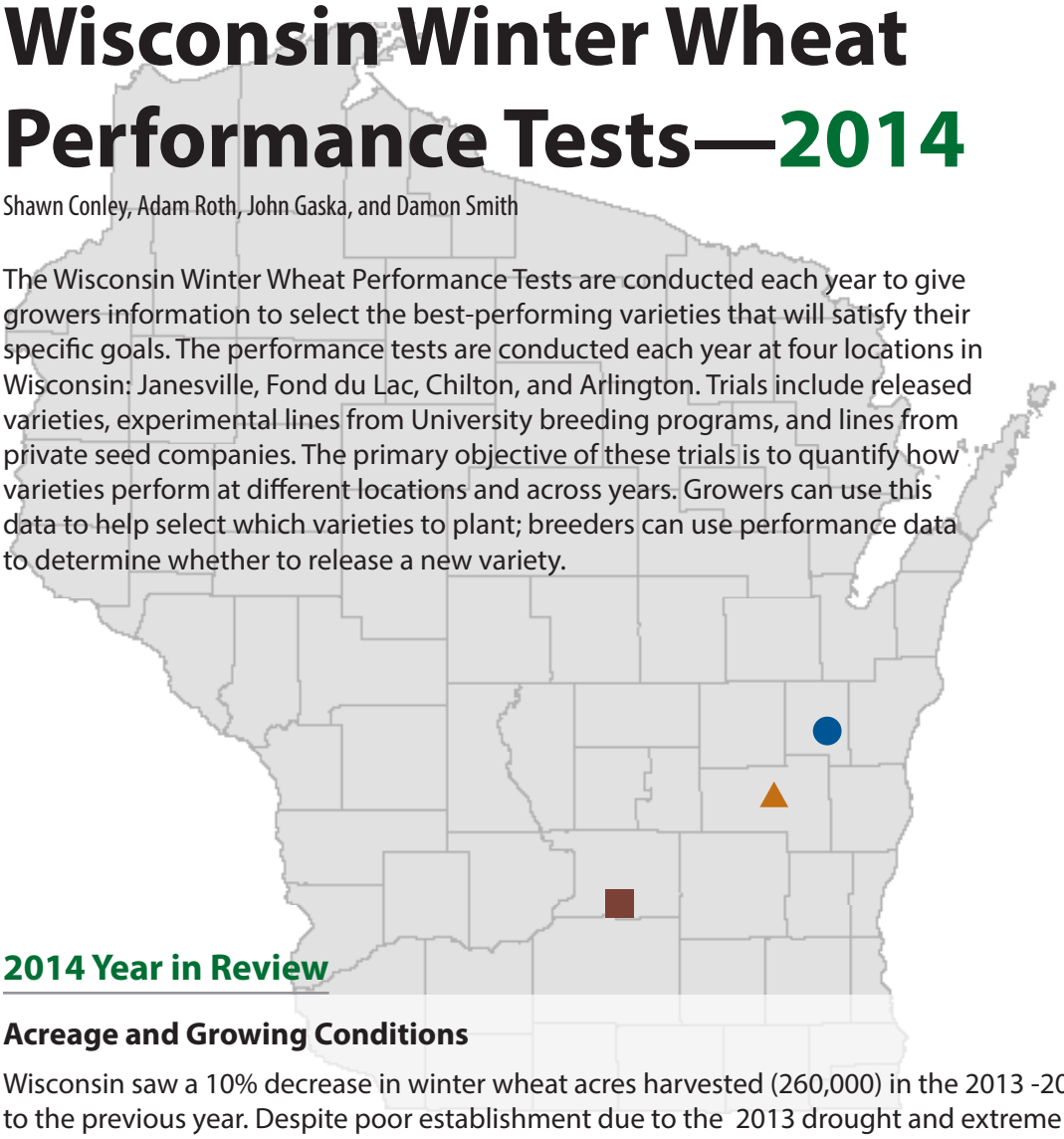
The Wisconsin Winter Wheat Performance Tests are conducted each year to give growers information to select the best-performing varieties that will satisfy their specific goals. The performance tests are conducted each year at four locations in Wisconsin: Janesville, Fond du Lac, Chilton, and Arlington. Trials include released varieties, experimental lines from University breeding programs, and lines from private seed companies. The primary objective of these trials is to quantify how varieties perform at different locations and across years. Growers can use this data to help select which varieties to plant; breeders can use performance data to determine whether to release a new variety.



Chilton
Cooperator: Kolbe Seeds
Kewaunee loam
7.5 inch row spacing
Applied 75 lb N/a
Post-emergent herbicide: Huskie
Planted: September 27, 2013
Harvested: August 6, 2014

Fond du Lac
Cooperator: Ed Montsma, Mike Rankin
Plano silt loam
7.5 inch row spacing
Applied 55 lb N/a (nitrogen credited from previous legume)
Post-emergent herbicide: Huskie
Planted: October 2, 2013
Harvested: July 28, 2014

Arlington
Cooperators: Mike Bertram, Matt Repking
Plano silt loam soil
7.5 inch row spacing
Applied 55 lb N/a (nitrogen credited from previous legume)
Post-emergent herbicide: Huskie
Planted: September 26, 2013
Harvested: July 24, 2014

2014 Year in Review

Acreage and Growing Conditions

Wisconsin saw a 10% decrease in winter wheat acres harvested (260,000) in the 2013 -2014 growing season compared to the previous year. Despite poor establishment due to the 2013 drought and extreme cold conditions throughout the winter and severe winterkill in the spring of 2014, the forecasted yield for the 2014 crop is 67 bu/a, up 9 bu/a from last year. Wheat establishment in the fall of 2013 was a challenge due to extreme drought across much of the WI winter wheat growing regions. Wheat germinated late and had poor tiller development prior to winter dormancy. This led to some thin spring stands and weed control problems. Wheat broke dormancy in April and continued to progress one to two weeks behind normal for much of the growing season. Winterkill and severe spring flooding led to thousands of wheat acres to be sprayed out and replanted to either corn or soybean. Furthermore, saturated fields delayed or prohibited many operations to the wheat crop including spring nitrogen, herbicide, and fungicide applications.

Overall, winter wheat yield and test weights were average in 2014. Wheat yields at the Arlington, Chilton, and Fond du Lac locations averaged 98, 103, and 98 bu/a, respectively. The Janesville site was abandoned due to severe winterkill. The Lancaster site was relocated to Fond du Lac county in the fall of 2013.
(Source: USDA National Agricultural Statistics Service (www.nass.usda.gov))

Diseases

Statewide incidence and severity of powdery mildew was very low in 2014. Low incidence of barley yellow dwarf virus visual symptoms was observed at all variety trial locations. Stripe rust was nearly non-existent at all locations. Leaf rust was identified at all locations in late June, however severity was low on flag leaves (<10%). Some incidence of bacterial leaf streak was also identified in early June at all trial locations. Severity on some varieties was moderate while low or non-existent on others. Cephalosporium stripe was also identified in some plots at the Fond du Lac trial site. The timing of flowering coincided with weather conditions that were favorable for Fusarium head blight in 2014 at the Fond du Lac and Chilton trial locations. Fusarium head blight incidence and severity was low at the Arlington location.

Using This Data to Select Top-Yielding Varieties

As with any crop, variety selection is the most important factor to consider in maximizing winter wheat yield and profitability. When choosing a winter wheat variety, several factors must be considered. These include winter survival, insect and disease resistance, heading date, lodging, test weight, and most importantly, yield. Since no variety is ideal for every location, it is important to understand the crop environment and pest complex that affects your specific region to maximize yield.

▶ **Yield** is based on the genetic potential and environmental conditions in which the crop is grown. Therefore, by diversifying the genetic pool that is planted, a grower can hedge against crop failure. Select those varieties that perform well not only in your area but across experimental sites and years. This will increase the likelihood that, given next year's environment (which you cannot control), the variety you selected will perform well. (Table 2 gives an overview of yields across all locations.)

▶ **Test weight** is also an important factor to consider when selecting a variety. The minimum test weight to be considered a U.S. #2 soft red winter wheat is 58 lb/bu. Wheat at lower test weights will be discounted. Both environment and pests may greatly affect test weight; therefore, selecting a variety that has a high test weight potential in your region is critical to maximizing economic gain.

▶ Select a variety that has the **specific disease resistance** characteristics that fits your needs. By selecting varieties with the appropriate level of resistance, crop yield loss may be either reduced or avoided without the need of pesticides. Careful management of resistant cultivars through crop and variety rotation are required to ensure that these characteristics are not lost.

▶ **Plant height and lodging potential** are also important varietal characteristics that may be affected by your cropping system. If the wheat crop is intended for grain only, it may be important to select a variety that is short in stature and has a low potential for lodging. This may decrease yield loss due to crop spoilage and harvest loss as well as increase harvesting rate. However, if the wheat crop is to be used as silage or is to be harvested as both grain and straw, then selecting a taller variety may be warranted.

Experimental Procedures

At Planting

Site details: Summarized in front cover image.

Seedbed preparation: Conventional and no-till methods.

Seeding rate: 1.5 million seeds per acre.

Seed treatments: Identified in Table 1.

Fertilizer and herbicides: Nitrogen was applied in spring according to UWEX recommendations. Phosphorus and potassium were applied as indicated by soil tests. Herbicides were applied for weed control as necessary.

Planting: A grain drill with a 9 row cone seeder was used to plant the plots, all 25 feet in length. To account for field variability and for statistical analysis, each variety was grown in four separate plots (replicates) in a randomized complete block design at each location.

Midseason

Disease assessments: Foliar disease assessments were made at all trial locations during June at Feekes 10.5.4 (kernels watery ripe). Assessments were made in the field by visual estimation of incidence (number of plants with symptoms) and average severity (magnitude of damage on plants with symptoms) across the plot using pre-made rating scale diagrams generated using the Severity.Pro software (F. Nutter, Iowa State University).

At Feekes 11.2 (soft dough) Fusarium head blight assessments were made at all trial locations. Entire plots were visually assessed for Fusarium head blight incidence and severity using pre-made rating scale diagrams. Incidence and severity were used to calculate the Fusarium head blight index. Data is shown in tables 4 and 5.

Harvest

Yield: The center seven rows of each plot were harvested with a self-propelled combine. Grain was weighed and moisture and test weight were determined in the field using electronic equipment on the plot harvester. Yield is reported as bu/a (60 lb/bu) at 13.5% moisture content.

Lodging: Lodging scores were based on the average erectness of the main stem of plants at maturity. 1 = all plants erect, 2 = slight lodging, 3 = plants lodged at 45° angle, 4 = severe lodging, 5 = all plants flat.

Data Presentation

Yield: Listed in Tables 2-5. Data for both 2013 and 2014 are provided if the variety was entered in the 2013 trials.

Least significant difference: Variations in yield and other characteristics occur because of variability in soil and other growing conditions that lower the precision of the results. Statistical analysis makes it possible to determine, with known probabilities of error, whether a difference is real or whether it may have occurred by chance.

Growers can use the appropriate least significant difference (LSD) value at the bottom of the tables to determine true statistical differences. Where the difference between two selected varieties within a column is equal to or greater than the LSD value at the bottom of the column, there is a real difference between the two varieties in nine out of ten instances. If the difference is less than the LSD value, there may still be a real difference, but the experiment has produced no evidence of it.

Table 1. Brand and Company Information of 2014 Entered Varieties and Seed Treatments

Brand & Company Information	2014 Varieties	Seed Treatments
AgriMAXX www.agrimaxxwheat.com AgriMAXX Wheat Company (855-629-9432)	413, 427, 438, 447	Vibrance Extreme, Cruiser 5FS
Diener www.biotownseeds.com BioTown Seeds (219-984-6038)	D492W D512W XW 1401 XW 1402	Warden Cereals, Nitro Shield, Ascend, QuickRoots EverGol, QuickRoots Dividend Extreme, Cruiser 5FS Warden Cereals HR, ApronXL, Maxim
DuPont Pioneer www.pioneer.com DuPont Pioneer (507-625-3045)	25R34, 25R40, 25R46, 25R47	Dividend Extreme, Gaucho
Dyna-Gro www.dynagroseed.com Dyna-Gro Seed (608-822-5000)	9042, 9223	Foothold Extra, Awaken St
Equity Seed www.go2dei.com Direct Enterprises (888-895-7333)	Guardian, Sienna, Exp 13W34	Athena
FS Seed www.fsseed.com/midwest Growmark, Inc. (309-660-5576)	FS 602, FS 622, FS 626 FS 625 WX14A	CruiserMaxx Vibrance Cereals, Thiram, Storicide II CruiserMaxx Vibrance Cereals, Storicide II CruiserMaxx Vibrance Cereals
Jung www.jungseedgenetics.com Jung Seed Genetics (815-441-5030)	5855, 5930 5888 Exp 1099	Cruiser 5FS, Vibrance Extreme Warden Cereals, Cruiser 5FS Thiamethoxam, Mefenoxam, Difenoconazole
Kratz Farms www.kratzfarms.com Kratz Farms, LLC (262-644-9426)	KF 15188 KF 15241 KF 15314	Vibrance Extreme Rancona, Metalaxyl, Macho 600ST Vibrance Extreme, Cruiser 5FS
L-Brand www.limagraincerealseeds.com Limagrain Cereal Seeds (309-569-0008)	L-400	Warden Cereals
L-Brand/ VanTreek www.limagraincerealseeds.com VanTreek's Seed Farm (920-467-2422)	L-241	Rancona, Metalaxyl
Legacy www.legacyseeds.com Legacy Seeds Inc. (715-467-2555)	LW 1155, LW 1335, LW1370, LW 1375, LXW 1370, LXW 1160 LXW 1480, LXW 1485 LW 1440, LXW 1475 LXW 1425	Sativa IM RTU, SabrEx Sativa IM RTU, SabrEx Athena CruiserMaxx Vibrance Cereals
PIP www.pipseeds.com Partners in Production (877-GRO-SEED)	704, 721, 722, 729, 732, 733, 734, 735, 736, 737, 738, 740, 741, 748, 752, 760, 766, 767, 782, 783, 792	Charter, Imidacloprid Charter, Imidacloprid Charter, Imidacloprid
Pro Seed Genetics Pro Seed Genetics Cooperative (920-388-2824)	PRO 200 PRO 240, PRO 260, PRO 320A PRO Ex 310, PRO Ex 370, PRO Ex 400 PRO Ex 380 PRO Ex 410	Bio-Forge, Macho 600ST, Dividend Extreme Bio-Forge, Macho 600ST, Rancona, Metastar, Storicide II Bio-Forge, Macho 600ST, Rancona, Metastar Bio-Forge, Macho 600ST, Maxim, ApronXL, Warden Cereals HR Bio-Forge, Macho 600ST
Public WI Foundation Seeds (608-262-9954) www.wisconsinfoundationseeds.wisc.edu	Hopewell, Kaskaskia, Red Devil Brand,Sunburst Otsego Red Dragon Brand	Bio-Forge, Macho 600ST, Rancona, Metastar, Storicide II Bio-Forge, Raxil MD, Macho 600ST Bio-Forge, Macho 600ST, Vibrance Extreme
Syngenta www.agriprowheat.com Syngenta Seeds (765-412-5420)	SY 474, SY 483, M09L-9547	Vibrance Extreme, Cruiser 5FS
Van Treeck VanTreek's Seed Farm (920-467-2422)	XL 334	Rancona, Metastar

Table 2. Combined 2014 Winter Wheat Performance Test Results (continued on next page)

		2014 3-test average		Arlington		Chilton		Fond du Lac		2013 4-test average[1]
Brand	Entry	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)
AgriMAXX	413	* 103	58.3	101	59.0	105	58.1	* 102	57.8	* 89
	427	100	54.8	97	53.1	102	56.1	99	55.0	80
	438	100	57.0	103	57.6	101	56.3	97	56.9	85
	447	95	54.8	94	54.8	96	55.5	93	54.0	--
Diener	D492W	101	58.5	100	58.8	102	58.3	* 102	58.3	* 91
	D512W	99	54.9	96	53.9	101	56.3	99	54.4	81
	XW 1401	* 104	59.0	102	60.2	* 110	58.4	100	58.2	--
	XW 1402	97	56.6	93	56.6	93	57.6	* 106	55.4	--
DuPont Pioneer	25R34	101	56.8	96	55.8	* 111	57.9	96	56.7	83
	25R40	* 103	59.0	105	59.7	107	58.6	97	58.4	84
	25R46	* 108	60.3	* 111	61.9	104	59.3	* 109	59.5	* 86
	25R47	99	56.7	98	57.0	104	57.3	95	55.6	* 88
Dyna-Gro	9042	97	57.1	96	56.4	94	57.7	100	57.1	82
	9223	* 103	55.1	101	54.2	101	55.9	* 107	55.2	* 87
Equity Seed	Guardian	93	57.4	95	56.6	95	58.7	90	56.7	80
	Sienna	96	56.4	85	54.9	106	57.4	97	56.7	83
	Exp 13W34	95	56.5	100	57.3	95	55.7	89	56.2	--
FS Seed	FS 602	100	58.6	102	59.0	* 109	58.8	88	57.9	* 87
	FS 622	97	60.7	94	60.9	96	60.4	101	60.8	83
	FS 625	97	54.8	98	54.7	99	56.1	95	53.4	80
	FS 626	102	58.7	100	59.3	106	58.4	100	58.3	77
	WX14A	101	57.9	94	57.1	* 108	58.9	* 102	57.6	--
Jung	5855	100	56.5	105	57.0	100	56.4	95	56.0	* 86
	5888	98	56.8	89	55.7	106	57.3	99	57.4	--
	5930	96	57.8	94	57.0	97	59.0	99	57.2	84
	Exp 1099	95	56.1	91	54.9	99	58.2	94	55.1	--
Kratz Farms	KF 15188	100	58.7	101	59.4	100	58.8	99	57.8	--
	KF 15241	100	60.0	95	59.9	* 108	61.2	95	58.9	--
	KF 15314	98	56.7	94	55.6	100	57.9	101	56.4	--
L-Brand	L-400	97	58.6	98	59.2	96	58.2	97	58.3	--
L-Brand / Van Treeck	L-241	102	60.0	102	60.0	104	60.5	99	59.3	--
Legacy	LW 1155	102	58.4	103	59.1	103	58.1	99	57.8	83
	LW 1335	102	59.1	98	58.7	* 109	59.9	98	58.7	81
	LW 1370	96	57.3	95	56.7	92	57.7	100	57.3	82
	LW 1375	* 103	57.1	* 108	57.8	101	57.2	98	56.3	* 91
	LW 1440	102	59.8	97	59.8	* 108	60.4	100	59.1	--
	LXW 1425	101	59.9	99	61.0	105	59.5	98	58.9	--
	LXW 1160	99	58.4	100	59.0	100	58.0	96	58.2	--
	LXW 1370	97	57.6	96	56.6	98	58.3	97	57.7	--
	LXW 1475	99	60.0	100	60.5	103	60.0	94	59.5	--
	LXW 1480	* 106	61.1	104	62.3	* 108	60.3	* 106	60.5	--
	LXW 1485	* 105	59.0	102	60.1	107	58.4	* 106	58.2	--

Table 2. Combined 2014 Winter Wheat Performance Test Results (continued from previous page)

Brand	Entry	2014 3-test average		Arlington		Chilton		Fond du Lac		2013 4-test average[1]
		Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)	Test wt. (lb/bu)	Yield (bu/a)
PIP	704	102	57.5	102	57.2	105	58.1	100	57.1	--
	721	* 104	55.3	101	54.4	107	56.7	* 104	54.9	85
	722	95	55.7	94	55.2	96	57.2	94	54.5	77
	729	101	60.1	102	61.3	105	60.1	96	58.9	84
	732	92	57.2	91	56.8	90	57.3	93	57.3	79
	733	102	58.0	100	58.0	106	57.5	101	58.3	* 92
	734	* 103	60.9	* 106	62.1	107	60.0	96	60.4	* 89
	735	* 109	58.8	* 106	59.6	* 114	58.6	* 105	58.2	* 87
	736	* 105	57.7	99	57.4	* 113	58.5	* 103	57.1	--
	737	* 106	60.9	102	61.4	* 109	60.7	* 106	60.4	--
	738	* 106	57.6	* 106	58.9	* 109	57.1	* 102	56.6	--
	740	98	55.8	96	55.1	104	57.5	94	54.9	78
	741	* 106	59.4	* 111	60.4	* 111	59.0	97	58.6	--
	748	102	59.9	103	61.0	103	59.1	99	59.3	82
	752	99	57.5	98	57.2	101	58.2	99	56.9	83
	760	* 103	59.0	101	59.3	106	58.6	101	58.9	85
	766	* 104	60.2	103	60.5	106	60.5	* 103	59.3	--
	767	98	56.5	97	56.1	99	58.0	98	55.4	--
	782	99	60.0	101	60.7	93	60.4	* 103	58.4	85
	783	98	58.4	90	58.2	* 109	59.3	93	57.6	85
	792	* 103	60.1	104	61.2	103	59.8	100	59.3	--
Pro Seed Genetics	PRO 200	93	58.6	89	57.5	96	59.6	93	58.7	84
	PRO 240	98	58.1	92	57.5	104	58.9	97	57.9	--
	PRO 260	100	56.1	101	56.4	103	57.0	96	54.4	80
	PRO 320A	* 103	59.2	104	59.9	* 113	59.1	91	58.5	80
	PRO Ex 310	95	56.6	96	56.1	97	57.5	93	56.3	84
	PRO Ex 370	100	55.9	96	55.6	104	57.0	99	55.1	79
	PRO Ex 380	100	59.7	97	59.7	106	61.2	96	57.8	84
	PRO Ex 400	96	58.4	91	57.9	104	58.3	93	58.9	--
	PRO Ex 410	100	57.4	94	56.4	106	58.2	* 102	57.7	--
Public	Hopewell	94	57.7	91	57.2	97	57.9	94	57.8	82
	Kaskaskia	100	60.4	98	60.6	105	60.6	96	59.8	83
	Otsego	94	58.5	96	59.0	91	57.7	95	58.8	--
	Red Devil Brand	99	60.0	100	61.4	101	59.7	95	58.7	80
	Red Dragon Brand	98	56.8	96	55.8	104	57.9	92	56.7	--
	Sunburst	95	59.7	100	61.0	97	59.6	88	58.4	* 86
Syngenta	SY 474	101	58.8	95	58.3	106	59.1	* 102	58.8	--
	SY 483	* 105	57.4	* 107	58.3	103	57.1	* 104	56.5	85
	M09L-9547	102	59.8	99	59.3	104	59.8	* 103	60.2	--
Van Treeck	XL 334	101	59.6	97	60.0	107	59.7	101	59.1	--
	Mean	100	58.1	98	58.1	103	58.4	98	57.6	82
	LSD (.10)	6	1.2	5	0.9	6	1.0	7	1.0	6

* Yield is not significantly different (0.10 level) than that of the highest yielding cultivar

[1] Four test sites included Arlington, Chilton, Janesville, and Lancaster

Table 3. Arlington 2014 Winter Wheat Performance Test Results (continued on next page)

Brand	Entry	2014 means Yield (bu/a)	Test weight (lb/bu)	Height (in.)	Lodging (1-5)	2013 means Yield (bu/a)	Test weight (lb/bu)
AgriMAXX	413	101	59.0	31	1	85	57.1
	427	97	53.1	34	1	80	56.5
	438	103	57.6	35	1	88	57.3
	447	94	54.8	34	1	--	--
Diener	D492W	100	58.8	30	1	* 92	57.3
	D512W	96	53.9	35	1	84	57.3
	XW 1401	102	60.2	32	1	--	--
	XW 1402	93	56.6	30	1	--	--
DuPont Pioneer	25R34	96	55.8	35	1	89	56.7
	25R40	105	59.7	30	1	91	58.8
	25R46	* 111	61.9	34	1	* 94	58.5
	25R47	98	57.0	32	1	91	56.6
Dyna-Gro	9042	96	56.4	33	1	77	57.4
	9223	101	54.2	34	1	84	56.5
Equity Seed	Guardian	95	56.6	35	1	87	56.8
	Sienna	85	54.9	36	1	90	57.3
	Exp 13W34	100	57.3	34	1	--	--
FS Seed	FS 602	102	59.0	31	1	89	57.2
	FS 622	94	60.9	30	1	84	59.4
	FS 625	98	54.7	32	1	82	56.4
	FS 626	100	59.3	32	1	84	57.7
	WX14A	94	57.1	33	1	--	--
Jung	5855	105	57.0	36	1	88	57.8
	5888	89	55.7	35	1	--	--
	5930	94	57.0	35	1	* 93	56.4
	Exp 1099	91	54.9	35	1	--	--
Kratz Farms	KF 15188	101	59.4	37	1	--	--
	KF 15241	95	59.9	34	1	--	--
	KF 15314	94	55.6	36	1	--	--
L-Brand	L-400	98	59.2	35	1	--	--
L-Brand / Van Treeck	L-241	102	60.0	34	1	--	--
Legacy	LW 1155	103	59.1	30	1	77	56.4
	LW 1335	98	58.7	34	1	84	58.8
	LW 1370	95	56.7	35	1	85	59.0
	LW 1375	* 108	57.8	35	1	89	55.1
	LW 1440	97	59.8	33	1	--	--
	LXW 1425	99	61.0	35	1	--	--
	LXW 1160	100	59.0	31	1	--	--
	LXW 1370	96	56.6	35	1	--	--
	LXW 1475	100	60.5	34	1	--	--
	LXW 1480	104	62.3	34	1	--	--
	LXW 1485	102	60.1	32	1	--	--

Table 3. Arlington 2014 Winter Wheat Performance Test Results (continued from previous page)

Brand	Entry	2014 means Yield (bu/a)	Test weight (lb/bu)	Height (in.)	Lodging (1-5)	2013 means Yield (bu/a)	Test weight (lb/bu)
PIP	704	102	57.2	34	1	--	--
	721	101	54.4	35	1	* 92	56.7
	722	94	55.2	34	1	80	56.6
	729	102	61.3	35	1	87	59.0
	732	91	56.8	32	1	83	56.9
	733	100	58.0	32	1	* 99	57.6
	734	* 106	62.1	35	1	* 92	59.5
	735	* 106	59.6	31	1	91	57.9
	736	99	57.4	32	1	--	--
	737	102	61.4	33	1	--	--
	738	* 106	58.9	31	1	--	--
	740	96	55.1	33	1	80	57.2
	741	* 111	60.4	31	1	--	--
	748	103	61.0	34	1	89	58.9
	752	98	57.2	32	1	81	57.8
	760	101	59.3	37	1	91	57.5
	766	103	60.5	34	1	--	--
	767	97	56.1	32	1	--	--
	782	101	60.7	32	1	* 92	60.9
	783	90	58.2	33	1	87	58.0
	792	104	61.2	35	1	--	--
Pro Seed Genetics	PRO 200	89	57.5	35	1	89	59.4
	PRO 240	92	57.5	37	1	--	--
	PRO 260	101	56.4	32	1	82	57.6
	PRO 320A	104	59.9	38	1	83	57.9
	PRO Ex 310	96	56.1	33	1	91	57.4
	PRO Ex 370	96	55.6	32	1	81	57.5
	PRO Ex 380	97	59.7	31	1	87	60.5
	PRO Ex 400	91	57.9	32	1	--	--
	PRO Ex 410	94	56.4	33	1	--	--
Public	Hopewell	91	57.2	36	1	79	58.5
	Kaskaskia	98	60.6	37	1	89	59.9
	Otsego	96	59.0	35	1	--	--
	Red Devil Brand	100	61.4	35	1	83	59.1
	Red Dragon Brand	96	55.8	37	1	--	--
	Sunburst	100	61.0	30	1	83	59.6
Syngenta	SY 474	95	58.3	36	1	--	--
	SY 483	* 107	58.3	34	1	80	55.2
	M09L-9547	99	59.3	35	1	--	--
Van Treeck	XL 334	97	60.0	34	1	87	59.7
	Mean	98	58.1	33	1	85	57.6
	LSD (.10)	5	0.9	2	NS	7	1.2

* Yield is not significantly different (0.10 level) than that of the highest yielding cultivar

Table 4. Chilton 2014 Winter Wheat Performance Test Results (continued on next page)

Brand	Entry	2014 means					2013 means	
		Yield (bu/a)	Test weight (lb/bu)	Height (in.)	Lodging (1-5)	FHB Index[1]	Yield (bu/a)	Test weight (lb/bu)
AgriMAXX	413	105	58.1	31	1.0	7	* 104	60.1
	427	102	56.1	34	1.0	25	86	58.4
	438	101	56.3	32	1.0	38	87	57.7
	447	96	55.5	33	1.0	18	--	--
Diener	D492W	102	58.3	29	1.0	10	* 101	59.5
	D512W	101	56.3	33	1.0	36	84	57.7
	XW 1401	* 110	58.4	30	1.0	13	--	--
	XW 1402	93	57.6	31	1.0	56	--	--
DuPont Pioneer	25R34	* 111	57.9	33	1.0	11	* 105	59.4
	25R40	107	58.6	28	1.0	25	83	59.9
	25R46	104	59.3	31	1.0	11	90	60.7
	25R47	104	57.3	31	1.0	13	* 103	59.7
Dyna-Gro	9042	94	57.7	30	1.0	27	89	58.9
	9223	101	55.9	34	1.0	21	* 95	58.5
Equity Seed	Guardian	95	58.7	32	1.0	19	79	59.2
	Sienna	106	57.4	35	1.0	24	84	58.9
	Exp 13W34	95	55.7	32	1.0	32	--	--
FS Seed	FS 602	* 109	58.8	30	1.0	14	* 98	59.4
	FS 622	96	60.4	31	1.0	19	* 96	61.8
	FS 625	99	56.1	31	1.0	33	86	58.1
	FS 626	106	58.4	31	1.0	8	85	59.0
	WX14A	* 108	58.9	33	1.0	15	--	--
Jung	5855	100	56.4	31	1.0	22	93	59.3
	5888	106	57.3	35	1.0	26	--	--
	5930	97	59.0	31	1.0	19	92	60.1
	Exp 1099	99	58.2	34	1.0	14	--	--
Kratz Farms	KF 15188	100	58.8	33	1.0	10	--	--
	KF 15241	* 108	61.2	32	1.0	28	--	--
	KF 15314	100	57.9	34	1.0	31	--	--
L-Brand	L-400	96	58.2	34	1.0	13	--	--
L-Brand / Van Treeck	L-241	104	60.5	33	1.0	14	--	--
Legacy	LW 1155	103	58.1	31	1.0	23	92	59.8
	LW 1335	* 109	59.9	34	1.3	17	* 98	62.0
	LW 1370	92	57.7	32	1.0	15	93	59.5
	LW 1375	101	57.2	32	1.0	22	* 95	60.1
	LW 1440	* 108	60.4	33	1.0	23	--	--
	LXW 1425	105	59.5	32	1.0	11	--	--
	LXW 1160	100	58.0	29	1.0	24	--	--
	LXW 1370	98	58.3	32	1.0	11	--	--
	LXW 1475	103	60.0	33	1.0	1	--	--
	LXW 1480	* 108	60.3	31	1.0	8	--	--
	LXW 1485	107	58.4	30	1.0	11	--	--

Table 4. Chilton 2014 Winter Wheat Performance Test Results (continued from previous page)

Brand	Entry	2014 means					2013 means	
		Yield (bu/a)	Test weight (lb/bu)	Height (in.)	Lodging (1-5)	FHB Index[1]	Yield (bu/a)	Test weight (lb/bu)
PIP	704	105	58.1	32	1.0	25	--	--
	721	107	56.7	34	1.0	35	87	57.6
	722	96	57.2	32	1.0	24	85	58.1
	729	105	60.1	31	1.0	19	* 97	61.2
	732	90	57.3	28	1.0	2	82	58.6
	733	106	57.5	30	1.0	8	* 98	58.8
	734	107	60.0	32	1.0	6	* 97	61.3
	735	* 114	58.6	31	1.0	15	* 97	59.6
	736	* 113	58.5	32	1.0	7	--	--
	737	* 109	60.7	32	1.0	15	--	--
	738	* 109	57.1	29	1.0	32	--	--
	740	104	57.5	31	1.0	34	86	57.6
	741	* 111	59.0	29	1.0	12	--	--
	748	103	59.1	33	1.0	8	* 95	61.1
	752	101	58.2	32	1.0	8	86	58.2
	760	106	58.6	34	1.0	22	92	61.1
	766	106	60.5	34	1.0	9	--	--
	767	99	58.0	32	1.0	26	--	--
	782	93	60.4	30	1.8	1	91	63.6
	783	* 109	59.3	33	1.0	20	89	59.8
	792	103	59.8	33	1.0	17	--	--
Pro Seed Genetics	PRO 200	96	59.6	35	1.0	35	* 99	61.0
	PRO 240	104	58.9	37	1.0	27	--	--
	PRO 260	103	57.0	31	1.0	44	93	58.7
	PRO 320A	* 113	59.1	36	1.0	16	84	60.2
	PRO Ex 310	97	57.5	30	1.0	26	91	58.9
	PRO Ex 370	104	57.0	31	1.0	48	91	58.7
	PRO Ex 380	106	61.2	30	2.0	11	90	63.2
	PRO Ex 400	104	58.3	31	1.0	35	--	--
	PRO Ex 410	106	58.2	32	1.0	23	--	--
Public	Hopewell	97	57.9	34	1.0	12	* 94	60.6
	Kaskaskia	105	60.6	35	1.5	16	* 95	62.2
	Otsego	91	57.7	33	1.0	25	--	--
	Red Devil Brand	101	59.7	35	1.0	17	* 98	60.7
	Red Dragon Brand	104	57.9	36	1.0	21	--	--
	Sunburst	97	59.6	29	1.0	11	* 103	62.5
Syngenta	SY 474	106	59.1	33	1.0	20	--	--
	SY 483	103	57.1	33	1.0	19	89	59.6
	M09L-9547	104	59.8	32	1.0	23	--	--
Van Treeck	XL 334	107	59.7	34	1.3	18	* 103	61.0
	Mean	103	58.4	32	1.0	20	89	59.6
	LSD (.10)	6	1.0	2	0.2	15	11	1.1

* Yield is not significantly different (0.10 level) than that of the highest yielding cultivar

[1] FHB Index (Fusarium head blight index) = (% severity x % incidence) / 100

Table 5. Fond du Lac 2014 Winter Wheat Performance Test Results (continued on next page)

Brand	Entry	2014 means				
		Yield (bu/a)	Test weight (lb/bu)	Height (in.)	Lodging (1-5)	FHB Index[1]
AgriMAXX	413	* 102	57.8	30	1	1
	427	99	55.0	34	1	7
	438	97	56.9	33	1	11
	447	93	54.0	32	1	0
Diener	D492W	* 102	58.3	31	1	3
	D512W	99	54.4	34	1	8
	XW 1401	100	58.2	33	1	3
	XW 1402	* 106	55.4	32	1	1
DuPont Pioneer	25R34	96	56.7	33	1	10
	25R40	97	58.4	30	1	17
	25R46	* 109	59.5	32	1	2
	25R47	95	55.6	32	1	15
Dyna-Gro	9042	100	57.1	32	1	0
	9223	* 107	55.2	36	1	3
Equity Seed	Guardian	90	56.7	33	1	14
	Sienna	97	56.7	37	1	0
	Exp 13W34	89	56.2	32	1	21
FS Seed	FS 602	88	57.9	30	1	3
	FS 622	101	60.8	32	1	2
	FS 625	95	53.4	34	1	7
	FS 626	100	58.3	31	1	0
	WX14A	* 102	57.6	34	1	4
Jung	5855	95	56.0	34	1	22
	5888	99	57.4	38	1	1
	5930	99	57.2	34	1	0
	Exp 1099	94	55.1	34	1	9
Kratz Farms	KF 15188	99	57.8	36	1	0
	KF 15241	95	58.9	34	1	2
	KF 15314	101	56.4	35	1	0
L-Brand	L-400	97	58.3	34	1	1
L-Brand / Van Treeck	L-241	99	59.3	34	1	0
Legacy	LW 1155	99	57.8	30	1	3
	LW 1335	98	58.7	36	1	0
	LW 1370	100	57.3	34	1	8
	LW 1375	98	56.3	34	1	14
	LW 1440	100	59.1	33	1	1
	LXW 1425	98	58.9	34	1	0
	LXW 1160	96	58.2	31	1	16
	LXW 1370	97	57.7	34	1	20
	LXW 1475	94	59.5	35	1	13
	LXW 1480	* 106	60.5	34	1	5
	LXW 1485	* 106	58.2	32	1	0

Table 5. Fond du Lac 2014 Winter Wheat Performance Test Results (continued from previous page)

Brand	Entry	2014 means Yield (bu/a)	Test weight (lb/bu)	Height (in.)	Lodging (1-5)	FHB Index[1]
PIP	704	100	57.1	34	1	10
	721	* 104	54.9	35	1	2
	722	94	54.5	33	1	22
	729	96	58.9	36	1	23
	732	93	57.3	30	1	6
	733	101	58.3	31	1	17
	734	96	60.4	33	1	11
	735	* 105	58.2	32	1	0
	736	* 103	57.1	33	1	0
	737	* 106	60.4	33	1	14
	738	* 102	56.6	30	1	0
	740	94	54.9	32	1	4
	741	97	58.6	30	1	1
	748	99	59.3	34	1	1
	752	99	56.9	32	1	0
	760	101	58.9	40	1	22
	766	* 103	59.3	36	1	25
	767	98	55.4	31	1	1
	782	* 103	58.4	31	1	0
	783	93	57.6	31	1	4
	792	100	59.3	34	1	3
Pro Seed Genetics	PRO 200	93	58.7	35	1	13
	PRO 240	97	57.9	40	1	9
	PRO 260	96	54.4	31	1	3
	PRO 320A	91	58.5	37	1	27
	PRO Ex 310	93	56.3	31	1	13
	PRO Ex 370	99	55.1	32	1	8
	PRO Ex 380	96	57.8	31	1	2
	PRO Ex 400	93	58.9	33	1	1
	PRO Ex 410	* 102	57.7	34	1	0
Public	Hopewell	94	57.8	40	1	1
	Kaskaskia	96	59.8	37	1	3
	Otsego	95	58.8	40	1	13
	Red Devil Brand	95	58.7	37	1	21
	Red Dragon Brand	92	56.7	38	1	0
	Sunburst	88	58.4	29	1	4
Syngenta	SY 474	* 102	58.8	36	1	1
	SY 483	* 104	56.5	34	1	16
	M09L-9547	* 103	60.2	35	1	5
Van Treeck	XL 334	101	59.1	36	1	0
	Mean	98	57.6	34	1	7
	LSD (.10)	7	1.0	2	NS	16

* Yield is not significantly different (0.10 level) than that of the highest yielding cultivar

[1] FHB Index (Fusarium head blight index) = (% severity x % incidence) / 100

The Wisconsin Winter Wheat Performance Tests were conducted by the Departments of Agronomy and Plant Pathology, College of Agricultural and Life Sciences and the University of Wisconsin-Extension in cooperation and with support from the Wisconsin Crop Improvement Association.

Check the following publications for additional information on small grain production and seed availability. Both are updated annually.

Pest Management in Wisconsin Field Crops (A3646) available at learningstore.uwex.edu

The Wisconsin Certified Seed Directory available at wcia.wisc.edu

For information on seed availability of public varieties:

Wisconsin Crop Improvement Association
554 Moore Hall, 1575 Linden Drive, Madison, WI 53706

(608) 262-1341, wcia.wisc.edu

To access crop performance testing information electronically, visit: www.coolbean.info

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