A3868

Wisconsin winter wheat performance tests—2011

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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: Arlington, Chilton, Janesville, and Lancaster. Trials include released varieties, experimental lines from neighboring states, 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 use performance data to determine whether to release a new variety.

Year in review

Acreage and growing conditions

Wisconsin saw a 37% increase in winter wheat acres harvested (315,000) in the 2010–2011 growing season compared to the previous year. The forecasted yield for the 2011 crop is 68 bu/a, up 4 bu/a from last year. The increase in winter wheat acres was due to timely corn and soybean harvest coupled with increased commodity price. Wheat that was established in a timely manner last fall looked very good to excellent going into winter dormancy; however, some areas had delayed emergence and poor fall growth due to dry soil conditions. Late-planted wheat suffered from poor tiller development that led to thin stands and weed control problems. Spring growing conditions were mostly favorable across the state; however, excessive rainfall did impact wheat in some low-lying areas. Warmer than normal temperatures in July accelerated crop maturity; however, yields were largely unaffected by the hot weather.

Winter wheat yields were variable across our testing locations due to variable rainfall, planting date, and disease pressure. Wheat yields at the Arlington, Chilton, Janesville, and Lancaster locations averaged 97, 71, 86, and 102 bu/a, respectively. Wheat yield and test weight at Chilton was reduced due to variable stands and poor tillering caused by adverse weather conditions (extremely wet and cool early spring) as well as delayed harvest caused by frequent rainfall events. Overall, winter wheat test weights were excellent in 2011. No winterkill was noted at any location.

Source: *USDA National Agricultural Statistics Service (www.nass.usda.gov)*

Diseases

In the winter wheat variety trial plots, colder than normal weather conditions during much of April and May appeared to impact foliar diseases. Septoria leaf blotch was the predominant disease noted in 2010–2011, with lower levels of powdery mildew. Barley yellow dwarf virus was observed at all variety trial locations, but the incidence was low. Rust diseases appeared to have a later onset, more similar to 2008–2009. The timing of flowering coincided with weather conditions that were less favorable for Fusarium head blight this year.

Table 1. Location and agronomics of winter wheat performance tests in Wisconsin

Location	Cooperators	Soil type	Row spacing (inches)	Nitrogen applied (lb/a)	Date planted (2010)	Date harvested (2011)
Arlington	J. Gaska, M. Repking	silt loam	7.5	40[a]	Sept. 27	July 21
Chilton	Kolbe Seeds, B. Larson	red clay	7.5	80	Sept. 29	Aug. 1
Janesville	Rock Co. Farm, J. Stute	silt loam	7.5	40[a]	Oct. 1	July 19
Lancaster	T. Wood	silt loam	7.5	0[a]	Sept. 28	July 20

[a] Nitrogen credited from previous soybean or alfalfa.

Table 2. Companies included in the 2011 performance tests

Brand	Company name	Phone	Website
Diener	BioTown Seeds	(219) 984-6038	www.biotownseeds.com
Direct	Direct Enterprises	(888) 895-7333	
Dyna-Gro	Dyna-Gro Seed	(614) 761-4110, ext. 3	www.dynagroseed.com
Excel/VanTreek	VanTreek Seed Farms	(920) 467-2422	
Excel/Welter	Welter Seed	(800) 728-8450	www.welterseed.com
FS Seed	Growmark, Inc.	(309) 557-6399	www.fsseed.com/midwest
Jung	Jung Seed Genetics, Inc.	(920) 326-5891	www.jungseedgenetics.com
Kratz	Kratz Farm	(262) 644-9426	
Legacy	Legacy Seeds, Inc.	(715) 256-9313	www.legacyseeds.com
Pioneer	Pioneer Hi-Bred International	(507) 625-3045	www.pioneer.com
PIP	Partners in Production	(877) GRO-SEED	www.pipseeds.com
Pro Seed Genetics	Pro Seed Genetics Coop.	(920) 388-2824	
Public	WI Foundation Seeds	(608) 846-9761	www.wisconsinfoundationseeds.wisc.edu/
Public–exp	WI Crop Improvement	(608) 262-0167	www.wcia.wisc.edu/
Syngenta	Syngenta Seeds	(765) 563-3111	www.agriprowheat.com

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 also across experimental sites and years. This will increase the likelihood that, given next year's environment (which you cannot control), the variety you select will perform well. (Table 5 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.

Table 3. Disease severity scale for assessing foliar wheat diseases

Severity rating	Leaf	Leaf area covered
10	Flag	> 15%
9	Flag	5–15%
8	Flag	1–5%
7	Flag-1	> 15%
6	Flag-1	5–15%
5	Flag-1	1–5%
4	Flag-2	> 15%
3	Flag-2	5–15%
2	Flag-2	1–5%
1	Flag-3	> 1%
0	any	< 1%

Adapted from: *P.E. Lipps and L.V. Madden. 1989. Assessment of methods of determining powdery mildew severity in relation to grain yield of winter wheat cultivars in Ohio. Phytopathology 79:462–470.*

Select a variety that has the specific **insect and disease resistance** characteristics that fit 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 is required to ensure that these characteristics are not lost.

Crop 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.

Data presentation

Yield: Listed in tables 5–9. Data for both 2010 and 2011 are provided if the variety was entered in the 2010 trials. The 2-year mean yield is calculated using location means as replications.

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.

Experimental procedures

At planting

Site details: Summarized in table 1.

Seedbed preparation: Conventional and conservation tillage methods.

Seeding rate: 1.5 million viable seeds per acre.

Seed treatments: Identified in table 4.

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

Planting: A grain drill with cone units was used to plant nine-row plots, 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

Diseases: Foliar disease assessments were made at all trial locations during June at Feekes growth stage 10.5.1 (beginning flowering). Assessments were made in the field on five stems per plot. A 0 to 10 scale was used to quantify foliar disease incidence and severity according to the procedures published by Lipps and Madden in 1989 (see table 3). Fusarium head blight ratings were not obtained given the low incidence of this disease in 2010–2011 in our trials.

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% moisture content.

Lodging: Scores are based on the Belgian Lodging System (0 = none, 9 = severe).

Table 4. Wheat seed treatment(s) applied to entered varieties

Brand	Variety	Seed treatments
Public	Hopewell	Rancona, Metalaxyl, Macho
	Kaskaskia	Rancona, Metalaxyl, Macho
	Milton	Raxil, Thiram, Nitro
	Red Devil	Rancona, Metalaxyl, Macho
	Red Ruby	Rancona, Metalaxyl, Macho
	Sunburst	Rancona, Metalaxyl, Macho
	Truman	Rancona, Metalaxyl, Macho
Public–exp	IL 01-11934	Rancona, Metalaxyl, Macho
	IL 06-14325	Rancona, Metalaxyl, Macho
	IL 07-20743	Rancona, Metalaxyl, Macho
Diener	D 487 W	Dividend Extreme
	D 492 W	Dividend Extreme
	D 498 W	Dividend Extreme
	D 508 W	Dividend Extreme
	D XW 4	Dividend Extreme
Direct	Quest	Raxil, Metalaxyl, Macho
	Sienna	Raxil, Metalaxyl, Macho
Dyna-Gro	9042	Tebuconazole, Metalaxyl, Awaken ST
	9911	Tebuconazole, Metalaxyl, Awaken ST
	V 9723	Tebuconazole, Metalaxyl, Awaken ST
Excel/VanTreek	EXCEL 234	Dividend Extreme, Storicide
Excel/Welter	EXCEL 442	Dividend Extreme
FS Seed	FS 620	Dividend Extreme, Cruiser
	FS 622	Dividend Extreme, Cruiser
	FS 628	Dividend Extreme, Cruiser
	FS 630	Dividend Extreme, Cruiser
Jung	5801	Raxil XT
	5830	Raxil XT
	5844	Raxil XT
	5855	Dividend Extreme, Cruiser
Kratz	WD-112	Dividend Extreme, Cruiser
	WD-139	Dividend Extreme
Legacy	LW 860	Sativa IM, Sabrex
	LW 862	Sativa IM
	LW 870	Sativa IM
	LW 1040	Sativa IM, Sabrex
	LW 1065	Dividend Extreme, Sabrex
	LW 1072	Sativa IM, Sabrex
	LW 1155	None
Pioneer	25R30	Dividend Extreme, Gaucho
	25R34	Dividend Extreme, Gaucho
	25R39	Dividend Extreme, Gaucho
	25R40	Dividend Extreme, Gaucho
	25R47	Dividend Extreme, Gaucho
PIP	702	Charter
	716	Charter
	717	Charter
	719	Charter
	723	Charter
	728	Charter
	729	Charter
	730	Charter
	731	Charter
	736	Charter
	740	Charter
	743	Charter
	750	Charter
	752	Charter
	756	Charter
	760	Charter
	760-Cruiser	Charter, Cruiser
	761	Charter
	766	Charter
	773	Charter
	776	Charter
	786	Charter
Pro Seed Genetics	PRO 200	Rancona, Metastar, Macho
	PRO 220	Rancona, Metastar, Macho
	PRO 240	Rancona, Metastar, Macho
	PRO Ex 260	Rancona, Metastar, Macho
	PRO Ex 280	Rancona, Metastar, Macho
	PRO Ex 320A	Rancona, Metastar, Macho
	PRO Ex 360A	Dividend Extreme
Pro Seed/Kratz	PRO 200-HMO	Dividend Extreme, HMO
	PRO 240-HMO	Rancona, Metastar, Macho, HMO
Syngenta	Branson	Dividend Extreme, Cruiser
	OAKES	Dividend Extreme, Cruiser
	W1062	Dividend Extreme, Cruiser
	W1104	Dividend Extreme, Cruiser
	W1566	Dividend Extreme, Cruiser

Table 5. Combined 2011 winter wheat performance test results

Brand	Entry	2011 means		Arlington		Chilton		Janesville		Lancaster		2-year
		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)	Test wt. (lb/bu)	8-test yield (bu/a)
Public	Hopewell	88	58.5	97	60.3	71	55.7	82	60.4	100	57.7	82
	Kaskaskia	85	60.2	93	62.4	65	58.8	90	60.6	91	59.2	80
	Milton	90	59.2	89	61.7	*74	57.3	90	59.6	106	58.2	84
	Red Devil	*94	59.3	102	61.8	*84	58.6	84	59.1	105	57.9	
	Red Ruby	88	57.8	91	59.4	72	56.2	83	58.5	104	57.2	83
	Sunburst	87	60.7	95	63.2	*75	57.9	83	61.5	96	60.1	83
	Truman	86	59.2	90	61.6	60	57.8	87	59.6	105	57.8	79
Public–exp	IL 01-11934	91	60.0	98	61.7	72	58.0	91	60.3	104	60.1	84
	IL 06-14325	88	59.7	99	61.9	67	57.8	85	60.3	102	58.8	
	IL 07-20743	80	60.8	88	64.3	63	58.8	77	61.0	93	59.2	
Diener	D 487 W	84	59.8	84	62.7	73	58.1	81	60.0	96	58.2	82
	D 492 W	89	56.9	95	58.7	67	55.2	88	57.9	105	55.8	86
	D 498 W	*93	59.3	98	61.4	*77	57.6	89	59.6	*109	58.8	
	D 508 W	90	57.9	99	60.1	*75	56.2	85	58.8	102	56.6	86
	D XW 4	*95	57.7	*103	60.4	*75	55.7	92	57.9	*109	56.5	
Direct	Quest	86	56.3	88	58.0	*77	54.2	81	56.9	97	56.2	
	Sienna	*93	57.8	*107	60.6	69	55.6	93	58.5	101	56.5	
Dyna-Gro	9042	*98	58.4	*103	61.1	*86	56.7	93	58.7	*109	57.0	
	9911	84	59.0	84	61.6	70	57.1	83	58.9	100	58.4	82
	V 9723	88	57.7	98	60.2	70	55.8	80	57.9	104	56.9	83
Excel/VanTreek	EXCEL 234	87	59.0	97	62.1	68	57.5	83	59.0	101	57.4	
Excel/Welter	EXCEL 442	*93	57.9	*104	60.1	71	56.0	90	58.5	105	56.9	*87
FS Seed	FS 620	89	59.3	97	61.5	66	57.6	91	59.9	103	58.3	82
	FS 622	91	59.2	93	61.5	*78	57.9	88	59.8	105	57.6	
	FS 628	89	58.6	98	60.5	69	55.8	86	58.7	104	59.2	83
	FS 630	83	58.7	88	60.6	62	56.1	82	58.8	100	59.4	77
Jung	5801	88	57.5	96	60.7	69	56.5	83	57.8	102	55.2	
	5830	85	59.3	87	62.0	68	57.2	87	59.7	96	58.3	83
	5844	92	57.9	100	60.8	*76	56.0	82	58.2	*110	56.6	85
	5855	*94	57.9	100	60.5	*79	55.7	88	58.3	108	56.9	*88
Kratz	WD 112	84	58.2	91	60.1	65	57.3	83	58.8	97	56.6	
	WD 139	84	56.6	89	57.9	68	55.7	80	57.5	100	55.3	
Legacy	LW 860	89	58.6	96	61.0	*76	56.5	85	59.0	97	57.9	86
	LW 862	90	57.9	98	60.1	*74	55.8	86	58.8	102	56.9	83
	LW 870	90	58.8	*104	61.5	66	56.2	86	59.1	105	58.3	85
	LW 1040	91	58.1	*106	60.7	72	56.3	84	58.5	101	56.9	
	LW 1065	88	59.1	96	61.8	*74	57.4	85	59.2	95	58.1	
	LW 1072	86	59.2	85	61.5	63	57.7	86	59.6	*109	57.8	79
	LW 1155	90	57.2	93	58.7	66	55.6	87	58.8	*113	55.8	
Pioneer	25R30	*94	59.0	*107	61.7	68	57.2	89	59.5	*110	57.8	
	25R34	*99	58.6	*111	60.3	*78	57.2	88	58.5	*117	58.5	
	25R39	*96	58.6	*111	61.7	71	56.0	91	59.4	*112	57.3	*87
	25R40	*93	57.5	*106	59.8	62	56.2	91	58.2	*113	55.8	
	25R47	*94	57.4	*104	60.1	71	55.7	92	58.0	*110	56.0	86

Table 5. continued

Brand	Entry	2011 means		Arlington		Chilton		Janesville		Lancaster		2-year
		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)	Test wt. (lb/bu)	8-test yield (bu/a)
PIP	702	*94	57.8	*105	60.4	*74	55.4	92	58.7	104	56.7	
	716	88	60.1	91	61.6	*74	58.6	87	60.8	101	59.3	
	717	92	59.5	96	61.9	*82	58.3	89	59.9	101	58.0	85
	719	85	59.5	98	61.4	66	58.3	84	60.4	91	58.0	
	723	90	58.6	100	61.0	*75	56.5	83	59.2	102	57.6	
	728	92	58.0	97	60.0	*74	56.4	89	58.9	107	56.7	
	729	*96	59.7	*107	62.3	*76	58.6	88	59.7	*113	58.3	*92
	730	91	56.6	96	58.9	*74	55.1	85	57.0	107	55.6	86
	731	91	58.8	98	61.2	*74	57.1	87	59.9	106	57.2	
	736	89	58.6	*103	61.4	70	56.1	84	59.5	97	57.6	
	740	91	58.0	101	60.6	*77	56.8	*101	58.5	84	55.8	
	743	88	58.7	94	60.7	73	56.8	92	59.7	94	57.6	
	750	90	59.8	88	61.9	*82	58.4	85	60.2	105	58.8	
	752	*93	58.4	102	61.2	71	56.5	93	59.0	107	57.1	*87
	756	*94	58.9	99	61.3	*79	56.4	91	59.5	105	58.6	
	760	*95	58.9	*104	61.3	*82	56.7	85	59.5	107	58.0	*88
	760-Cruiser	89	58.8	99	61.3	68	56.0	85	59.1	104	58.6	*87
	761	92	58.6	101	61.0	*77	56.5	86	59.1	102	57.9	*89
	766	92	58.7	*105	61.3	67	55.7	93	59.5	102	58.2	
	773	*94	58.9	*103	61.2	*74	56.7	90	59.6	107	58.2	
	776	92	58.7	*104	60.9	*75	56.4	86	59.7	104	57.9	
	786	*93	58.6	101	61.2	*83	56.5	84	59.1	104	57.7	
Pro Seed Genetics	PRO 200	84	59.8	88	62.4	64	57.3	85	60.2	99	59.1	81
	PRO 220	79	60.4	81	62.6	73	59.4	75	60.6	88	59.0	77
	PRO 240	92	58.3	95	60.9	72	56.0	89	58.4	*110	57.9	84
	PRO Ex 260	*97	58.1	102	61.1	*85	57.0	*94	58.4	105	56.1	
	PRO Ex 280	88	59.8	90	61.4	71	58.7	85	60.3	104	58.7	
	PRO Ex 320A	91	58.3	*105	60.4	64	56.2	91	59.5	105	57.3	*87
	PRO Ex 360A	*93	58.9	102	60.9	66	56.5	*94	59.7	108	58.4	*88
Pro Seed/Kratz	PRO 200-HMO	84	59.4	87	62.0	67	57.8	78	59.4	102	58.3	
	PRO 240-HMO	89	58.2	95	60.4	72	56.6	86	58.4	102	57.2	
Syngenta	Branson	91	58.6	95	60.5	73	57.6	84	59.2	*110	57.1	*89
	OAKES	*95	60.0	100	62.4	*78	59.1	*94	60.2	106	58.2	
	W1062	87	57.9	99	60.0	65	55.8	80	58.7	105	57.0	
	W1104	*93	58.0	*108	60.1	71	56.6	92	59.0	102	56.4	85
	W1566	90	57.1	96	59.4	*75	55.3	84	57.6	103	56.0	83
Mean		89	58.6	97	61.1	71	56.9	86	59.2	102	57.6	84
LSD (.10)		6	0.6	8	0.6	12	0.7	7	1.0	8	1.4	5

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

Table 6. Arlington site—2011 winter wheat performance test results

Brand	Entry	2011 means							2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Leaf rust[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
Public	Hopewell	97	60.3	34	0.2	1.7	0.1	0.1	86	53.8	92
	Kaskaskia	93	62.4	37	0.2	2.7	0.0	0.3	86	57.6	90
	Milton	89	61.7	33	0.2	0.7	0.1	0.1	*96	58.8	93
	Red Devil	102	61.8	34	0.2	0.1	0.1	0.3			
	Red Ruby	91	59.4	34	1.4	1.1	0.4	0.0	89	57.1	90
	Sunburst	95	63.2	29	0.2	1.9	0.0	0.1	*94	60.2	95
	Truman	90	61.6	33	0.2	3.0	0.2	0.5	78	56.6	84
Public–exp	IL 01-11934	98	61.7	35	0.2	2.3	0.0	0.1	88	58.9	93
	IL 06-14325	99	61.9	34	0.2	0.7	0.1	0.1			
	IL 07-20743	88	64.3	36	0.2	0.5	2.3	0.0			
Diener	D 487 W	84	62.7	34	0.2	3.0	0.0	0.1	84	57.1	84
	D 492 W	95	58.7	29	0.2	0.2	0.0	0.0	*97	54.9	96
	D 498 W	98	61.4	33	0.2	1.0	0.0	0.1			
	D 508 W	99	60.1	37	0.2	2.7	1.1	0.3	91	56.3	95
	D XW 4	*103	60.4	38	0.2	0.9	0.0	0.0			
Direct	Quest	88	58.0	32	0.2	2.5	0.3	0.3			
	Sienna	*107	60.6	38	0.2	1.4	0.0	0.1			
Dyna-Gro	9042	*103	61.1	34	1.0	0.5	0.5	0.1			
	9911	84	61.6	32	0.2	1.1	0.1	0.1	88	58.3	86
	V 9723	98	60.2	37	0.2	4.2	0.1	0.1	86	55.4	92
Excel/VanTreek	EXCEL 234	97	62.1	35	0.2	2.0	0.2	0.0			
Excel/Welter	EXCEL 442	*104	60.1	36	0.2	1.8	1.9	0.7	88	56.6	96
FS Seed	FS 620	97	61.5	36	0.2	1.9	0.0	0.1	79	58.2	88
	FS 622	93	61.5	33	0.2	0.7	0.3	0.0			
	FS 628	98	60.5	38	0.2	3.8	0.0	0.1	88	55.9	93
	FS 630	88	60.6	37	0.2	2.0	1.1	0.5	86	56.5	87
Jung	5801	96	60.7	36	0.2	3.6	0.0	0.6			
	5830	87	62.0	33	0.2	0.7	0.1	0.1	88	58.3	88
	5844	100	60.8	37	0.2	3.3	0.6	0.6	91	56.1	96
	5855	100	60.5	37	0.2	0.7	0.0	0.1	*94	54.2	97
Kratz	WD 112	91	60.1	36	0.2	4.9	0.0	0.1			
	WD 139	89	57.9	34	0.2	2.2	0.0	0.1			
Legacy	LW 860	96	61.0	34	0.2	3.2	0.0	0.1	92	57.3	94
	LW 862	98	60.1	37	0.2	3.5	0.3	0.0	89	55.1	94
	LW 870	*104	61.5	35	0.2	3.5	0.0	0.1	88	57.4	96
	LW 1040	*106	60.7	37	0.2	1.9	0.3	0.8			
	LW 1065	96	61.8	34	0.2	3.5	0.0	0.0			
	LW 1072	85	61.5	33	0.2	1.7	0.0	0.0	75	57.6	80
	LW 1155	93	58.7	30	0.2	0.9	0.6	0.3			
Pioneer	25R30	*107	61.7	32	0.2	0.2	0.1	0.0			
	25R34	*111	60.3	35	0.2	0.8	0.1	0.0			
	25R39	*111	61.7	33	0.2	0.6	1.5	0.1	*95	56.0	*103
	25R40	*106	59.8	32	0.2	0.4	0.1	0.1			
	25R47	*104	60.1	32	0.2	1.1	0.0	0.1	*93	56.8	*99

Table 6. continued

Brand	Entry	2011 means							2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Leaf rust[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
PIP	702	*105	60.4	39	0.2	2.3	0.5	0.4			
	716	91	61.6	34	0.2	1.3	1.0	0.0			
	717	96	61.9	36	0.2	2.2	0.0	0.1	86	58.6	91
	719	98	61.4	35	1.0	0.5	0.1	0.0			
	723	100	61.0	36	0.6	3.1	2.1	0.1			
	728	97	60.0	35	0.2	1.2	1.3	0.3			
	729	*107	62.3	34	0.2	0.5	0.0	0.0	*93	58.8	*100
	730	96	58.9	31	0.2	0.8	0.0	0.3	92	55.5	94
	731	98	61.2	33	0.2	0.5	0.3	0.0			
	736	*103	61.4	35	0.2	3.9	0.2	0.1			
	740	101	60.6	36	0.2	0.9	0.0	0.1			
	743	94	60.7	35	0.2	4.2	0.0	0.3			
	750	88	61.9	33	0.2	0.8	0.0	0.1			
	752	102	61.2	34	0.2	0.7	0.2	0.3	*98	56.5	*100
	756	99	61.3	35	0.9	3.3	1.7	0.0			
	760	*104	61.3	35	0.2	3.9	0.3	0.1	87	57.4	96
	760-Cruiser	99	61.3	34	1.0	3.8	1.6	0.1	92	57.3	96
	761	101	61.0	34	0.2	3.3	0.4	1.1	92	57.4	97
	766	*105	61.3	35	0.2	4.1	0.0	0.2			
	773	*103	61.2	35	0.7	2.8	0.8	0.0			
	776	*104	60.9	35	0.2	4.1	0.0	0.1			
	786	101	61.2	35	0.2	4.5	0.3	0.3			
Pro Seed Genetics	PRO 200	88	62.4	38	0.2	0.7	1.4	0.1	90	58.6	89
	PRO 220	81	62.6	37	0.2	1.5	0.3	0.1	86	59.7	84
	PRO 240	95	60.9	35	0.2	3.9	0.0	0.1	92	56.0	94
	PRO Ex 260	102	61.1	36	0.2	0.9	0.0	0.1			
	PRO Ex 280	90	61.4	31	0.2	2.3	0.0	0.0			
	PRO Ex 320A	*105	60.4	37	0.2	2.3	1.1	0.3	91	57.0	*98
	PRO Ex 360A	102	60.9	34	0.2	0.5	0.1	0.1	*99	56.2	*101
Pro Seed/Kratz	PRO 200-HMO	87	62.0	36	0.2	0.9	0.0	0.1			
	PRO 240-HMO	95	60.4	39	0.2	4.4	0.1	0.4			
Syngenta	Branson	95	60.5	33	0.2	0.5	0.1	0.1	*100	56.5	*98
	OAKES	100	62.4	34	0.2	0.6	0.4	0.0			
	W1062	99	60.0	35	0.2	0.9	0.0	0.3			
	W1104	*108	60.1	34	0.2	0.4	0.1	0.0	92	55.0	*100
	W1566	96	59.4	39	0.7	0.6	0.0	0.0	82	54.9	89
Mean		97	61.1	34	0.3	1.8	0.3	0.2	89	56.9	93
LSD (.10)		8	0.6	2	ns	1.1	0.8	0.4	7	1.1	5

[a] Disease severity was rated on a scale from 0 to 10 as defined in table 3.

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

Table 7. Chilton—2011 winter wheat performance test results

Brand	Entry	2011 means						2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
Public	Hopewell	71	55.7	26	0.2	0.3	0.1	56	49.7	64
	Kaskaskia	65	58.8	27	0.2	1.0	0.1	77	52.6	71
	Milton	*74	57.3	26	0.2	0.3	0.1	68	48.7	71
	Red Devil	*84	58.6	28	0.2	0.5	0.0			
	Red Ruby	72	56.2	25	0.2	0.0	0.0	67	46.2	70
	Sunburst	*75	57.9	22	0.2	1.2	0.2	68	50.7	72
	Truman	60	57.8	26	0.2	1.1	0.2	61	48.7	61
Public–exp	IL 01-11934	72	58.0	26	0.2	0.6	0.0	*79	54.3	*76
	IL 06-14325	67	57.8	27	0.2	0.4	0.0			
	IL 07-20743	63	58.8	26	0.2	1.0	0.3			
Diener	D 487 W	73	58.1	26	0.2	0.8	0.0	77	54.8	75
	D 492 W	67	55.2	24	0.2	0.6	0.0	71	47.5	69
	D 498 W	*77	57.6	25	0.2	0.4	0.1			
	D 508 W	*75	56.2	29	0.2	0.6	0.6	77	48.4	*76
	D XW 4	*75	55.7	30	0.2	0.5	0.1			
Direct	Quest	*77	54.2	26	0.2	0.4	0.2			
	Sienna	69	55.6	27	0.2	0.3	0.0			
Dyna-Gro	9042	*86	56.7	27	0.2	1.0	0.0			
	9911	70	57.1	22	0.2	0.6	0.0	*79	54.4	75
	V 9723	70	55.8	27	0.2	0.9	0.0	68	49.4	69
Excel/VanTreek	EXCEL 234	68	57.5	25	0.2	0.5	0.0			
Excel/Welter	EXCEL 442	71	56.0	28	0.2	0.4	0.0	72	49.9	72
FS Seed	FS 620	66	57.6	25	0.2	0.8	0.0	*84	54.5	75
	FS 622	*78	57.9	24	0.2	0.3	0.2			
	FS 628	69	55.8	28	0.2	1.6	0.2	65	48.9	67
	FS 630	62	56.1	28	0.2	2.3	2.0	60	48.8	61
Jung	5801	69	56.5	26	0.2	0.8	0.1			
	5830	68	57.2	23	0.2	0.7	0.0	*79	51.4	74
	5844	*76	56.0	28	0.2	0.8	0.4	62	49.0	69
	5855	*79	55.7	29	0.2	0.6	0.0	73	46.8	*76
Kratz	WD 112	65	57.3	28	0.2	1.1	0.0			
	WD 139	68	55.7	23	0.2	0.5	0.0			
Legacy	LW 860	*76	56.5	27	0.2	0.7	0.0	75	53.3	*76
	LW 862	*74	55.8	28	0.2	1.8	0.0	66	49.4	70
	LW 870	66	56.2	25	0.2	0.7	0.0	65	50.9	66
	LW 1040	72	56.3	27	0.2	0.7	0.4			
	LW 1065	*74	57.4	25	0.2	0.4	0.3			
	LW 1072	63	57.7	26	0.2	0.8	0.0	*84	54.0	74
	LW 1155	66	55.6	23	0.2	0.4	0.0			
Pioneer	25R30	68	57.2	24	0.2	0.8	0.0			
	25R34	*78	57.2	26	0.2	0.4	0.3			
	25R39	71	56.0	24	0.2	0.8	0.1	64	49.5	68
	25R40	62	56.2	24	0.2	0.1	0.0			
	25R47	71	55.7	23	0.2	0.8	0.1	61	49.3	66

Table 7. continued

Brand	Entry	2011 means						2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
PIP	702	*74	55.4	29	0.2	0.6	0.4			
	716	*74	58.6	26	0.5	0.6	1.0			
	717	*82	58.3	27	0.2	1.0	0.0	*86	53.6	*84
	719	66	58.3	24	0.2	0.0	0.0			
	723	*75	56.5	26	0.2	0.8	0.0			
	728	*74	56.4	28	0.2	0.5	1.5			
	729	*76	58.6	27	0.2	0.3	0.0	*81	52.2	*79
	730	*74	55.1	24	0.2	0.3	0.2	72	49.4	73
	731	*74	57.1	26	0.2	0.3	0.1			
	736	70	56.1	27	0.2	1.3	0.0			
	740	*77	56.8	26	0.2	0.4	0.1			
	743	73	56.8	26	0.2	1.1	0.3			
	750	*82	58.4	23	0.2	0.9	0.0			
	752	71	56.5	24	0.2	0.3	0.0	64	49.0	68
	756	*79	56.4	28	0.2	1.0	0.0			
	760	*82	56.7	26	0.2	1.6	0.0	*78	51.0	*80
	760-Cruiser	68	56.0	26	0.2	1.0	0.1	70	53.5	69
	761	*77	56.5	27	0.2	0.9	0.0	*86	52.4	*82
	766	67	55.7	26	0.2	0.7	0.1			
	773	*74	56.7	26	0.2	1.0	0.0			
	776	*75	56.4	26	0.2	1.2	0.0			
	786	*83	56.5	26	0.2	1.0	0.2			
Pro Seed Genetics	PRO 200	64	57.3	26	0.4	0.5	0.1	72	52.0	68
	PRO 220	73	59.4	28	0.2	0.5	0.7	68	54.7	71
	PRO 240	72	56.0	28	0.2	1.0	0.6	64	49.1	68
	PRO Ex 260	*85	57.0	27	0.2	0.3	0.6			
	PRO Ex 280	71	58.7	27	0.2	1.6	0.0			
	PRO Ex 320A	64	56.2	27	0.2	1.0	0.2	73	48.0	69
	PRO Ex 360A	66	56.5	25	0.2	0.5	0.0	74	51.7	70
Pro Seed/Kratz	PRO 200-HMO	67	57.8	25	0.2	0.7	0.3			
	PRO 240-HMO	72	56.6	29	0.2	1.0	0.4			
Syngenta	Branson	73	57.6	25	0.2	0.0	0.0	73	48.6	73
	OAKES	*78	59.1	26	0.2	0.6	0.2			
	W1062	65	55.8	25	0.2	1.0	0.0			
	W1104	71	56.6	26	0.2	0.1	0.2	60	48.8	66
	W1566	*75	55.3	30	0.2	0.5	0.0	68	50.1	72
Mean		71	56.9	26	0.2	0.7	0.1	69	50.6	71
LSD (.10)		12	0.7	2	ns	0.6	0.4	8	2.3	8

[a] Disease severity was rated on a scale from 0 to 10 as defined in table 3.

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

Table 8. Janesville site—2011 winter wheat performance test results

Brand	Entry	2011 means						2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
Public	Hopewell	82	60.4	34	0.2	0.9	0.0	69	49.5	76
	Kaskaskia	90	60.6	40	2.0	2.0	0.7	57	48.6	74
	Milton	90	59.6	35	1.0	0.8	0.0	68	52.0	*79
	Red Devil	84	59.1	33	0.2	0.9	0.0			
	Red Ruby	83	58.5	34	0.2	0.6	0.0	64	49.5	74
	Sunburst	83	61.5	32	0.2	1.6	0.0	66	47.8	75
	Truman	87	59.6	33	0.2	2.3	0.3	63	50.8	75
Public–exp	IL 01-11934	91	60.3	34	0.2	0.9	0.1	59	48.0	75
	IL 06-14325	85	60.3	36	0.2	1.1	0.0			
	IL 07-20743	77	61.0	36	1.4	0.5	0.2			
Diener	D 487 W	81	60.0	34	0.6	2.9	0.0	75	55.2	78
	D 492 W	88	57.9	31	0.2	0.4	0.0	68	48.7	78
	D 498 W	89	59.6	34	0.2	0.2	0.0			
	D 508 W	85	58.8	37	1.0	0.6	0.3	71	53.1	78
	D XW 4	92	57.9	36	0.2	1.1	0.0			
Direct	Quest	81	56.9	33	0.2	1.5	0.0			
	Sienna	93	58.5	38	0.2	0.6	0.1			
Dyna-Gro	9042	93	58.7	35	0.2	0.1	0.0			
	9911	83	58.9	32	0.2	0.2	0.2	74	54.8	*79
	V 9723	80	57.9	35	0.7	2.5	0.1	73	49.9	77
Excel/VanTreek	EXCEL 234	83	59.0	33	0.2	1.9	0.1			
Excel/Welter	EXCEL 442	90	58.5	36	0.2	1.6	0.3	74	52.4	*82
FS Seed	FS 620	91	59.9	34	0.2	0.8	0.0	58	50.9	75
	FS 622	88	59.8	34	0.2	0.4	0.0			
	FS 628	86	58.7	37	0.9	3.0	0.0	68	49.6	77
	FS 630	82	58.8	38	0.2	1.2	1.0	62	47.6	72
Jung	5801	83	57.8	34	0.2	1.8	0.0			
	5830	87	59.7	34	0.2	1.0	0.1	75	51.3	*81
	5844	82	58.2	36	0.2	3.1	0.0	74	49.8	78
	5855	88	58.3	37	0.2	0.8	0.0	74	50.3	*81
Kratz	WD 112	83	58.8	37	0.2	3.9	0.0			
	WD 139	80	57.5	33	0.2	1.1	0.0			
Legacy	LW 860	85	59.0	36	0.2	2.2	0.0	*78	51.5	*82
	LW 862	86	58.8	36	0.2	2.2	0.0	69	49.5	78
	LW 870	86	59.1	36	0.2	2.1	0.0	*78	52.3	*82
	LW 1040	84	58.5	38	0.2	1.6	0.5			
	LW 1065	85	59.2	34	0.2	1.3	0.2			
	LW 1072	86	59.6	34	0.2	0.9	0.1	54	47.1	70
	LW 1155	87	58.8	31	0.2	0.3	0.1			

Table 8. continued

Brand	Entry	2011 means						2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
Pioneer	25R30	89	59.5	33	0.2	0.6	0.0			
	25R34	88	58.5	30	0.2	0.4	0.0			
	25R39	91	59.4	31	0.2	0.3	0.0	75	45.0	*83
	25R40	91	58.2	29	0.2	0.4	0.2			
	25R47	92	58.0	33	0.2	0.4	0.0	73	49.6	*83
PIP	702	92	58.7	37	0.8	0.9	0.1			
	716	87	60.8	37	2.9	1.3	0.7			
	717	89	59.9	34	0.2	1.1	0.1	59	50.4	74
	719	84	60.4	33	0.2	0.7	0.0			
	723	83	59.2	35	0.2	1.6	0.0			
	728	89	58.9	38	1.7	1.2	0.1			
	729	88	59.7	33	0.2	0.2	0.0	77	52.0	*83
	730	85	57.0	31	0.2	0.6	0.0	69	48.7	77
	731	87	59.9	34	0.6	0.7	0.0			
	736	84	59.5	37	0.2	2.5	0.0			
	740	*101	58.5	34	0.2	0.8	0.1			
	743	92	59.7	36	0.2	2.8	0.1			
	750	85	60.2	33	0.2	0.6	0.0			
	752	93	59.0	33	0.2	0.3	0.0	69	50.6	*81
	756	91	59.5	37	0.2	2.4	0.1			
	760	85	59.5	35	0.2	2.1	0.0	74	52.9	*80
	760-Cruiser	85	59.1	36	0.4	2.3	0.0	*86	54.5	*86
	761	86	59.1	36	0.2	2.6	0.0	74	53.6	*80
	766	93	59.5	37	0.2	3.4	0.0			
	773	90	59.6	37	0.2	3.2	0.0			
	776	86	59.7	36	0.2	2.8	0.1			
	786	84	59.1	33	0.2	2.6	0.2			
Pro Seed Genetics	PRO 200	85	60.2	38	1.6	0.9	0.2	67	50.7	76
	PRO 220	75	60.6	36	3.2	1.3	0.3	71	56.4	73
	PRO 240	89	58.4	37	1.5	3.2	0.0	66	49.9	78
	PRO Ex 260	*94	58.4	36	0.2	1.3	0.0			
	PRO Ex 280	85	60.3	35	0.2	1.0	0.0			
	PRO Ex 320A	91	59.5	36	0.2	2.4	0.9	77	53.0	*84
	PRO Ex 360A	*94	59.7	34	0.2	0.7	0.1	71	51.5	*83
Pro Seed/Kratz	PRO 200-HMO	78	59.4	36	0.2	1.3	0.2			
	PRO 240-HMO	86	58.4	36	0.2	2.7	0.3			
Syngenta	Branson	84	59.2	32	0.2	0.7	0.1	*79	51.4	*82
	OAKES	*94	60.2	34	0.2	0.4	0.0			
	W1062	80	58.7	35	0.2	1.0	0.0			
	W1104	92	59.0	35	0.2	0.3	0.0	69	47.5	*81
	W1566	84	57.6	40	0.2	0.4	0.1	67	48.3	76
Mean		86	59.2	34	0.4	1.3	0.1	62	56.6	78
LSD (.10)		7	1.0	2	0.8	1.0	0.3	8	1.5	7

[a] Disease severity was rated on a scale from 0 to 10 as defined in table 3.

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

Table 9. Lancaster site—2011 winter wheat variety trial results

Brand	Entry	2011 means						2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
Public	Hopewell	100	57.7	34	0.2	1.0	0.0	*91	53.3	96
	Kaskaskia	91	59.2	37	0.4	1.5	1.2	80	56.3	86
	Milton	106	58.2	34	0.2	0.5	0.1	84	55.6	95
	Red Devil	105	57.9	34	0.2	0.4	0.1			
	Red Ruby	104	57.2	32	0.4	0.5	0.0	90	56.0	97
	Sunburst	96	60.1	29	0.7	1.5	0.1	87	53.6	92
	Truman	105	57.8	35	0.2	1.7	0.0	85	54.1	95
Public–exp	IL 01-11934	104	60.1	34	0.2	1.2	0.0	84	56.2	94
	IL 06-14325	102	58.8	34	0.5	1.3	0.0			
	IL 07-20743	93	59.2	35	1.9	1.3	2.5			
Diener	D 487 W	96	58.2	34	0.2	2.5	0.0	84	56.2	90
	D 492 W	105	55.8	31	0.2	0.2	0.0	*93	52.1	99
	D 498 W	*109	58.8	34	0.2	0.5	0.0			
	D 508 W	102	56.6	35	0.4	1.7	0.2	87	54.3	95
	D XW 4	*109	56.5	38	1.1	1.9	0.0			
Direct	Quest	97	56.2	33	0.2	1.5	0.0			
	Sienna	101	56.5	37	0.7	1.0	0.0			
Dyna-Gro	9042	*109	57.0	33	0.2	0.3	0.0			
	9911	100	58.4	33	0.2	0.4	0.1	81	55.7	91
	V 9723	104	56.9	38	0.2	1.9	0.0	88	54.4	96
Excel/VanTreek	EXCEL 234	101	57.4	34	0.2	2.1	0.0			
Excel/Welter	EXCEL 442	105	56.9	37	0.4	1.2	0.0	90	51.2	98
FS Seed	FS 620	103	58.3	34	0.2	1.0	0.0	77	53.8	90
	FS 622	105	57.6	33	0.2	0.2	0.0			
	FS 628	104	59.2	36	0.4	1.4	0.1	89	54.7	97
	FS 630	100	59.4	35	0.6	1.6	3.9	79	53.7	90
Jung	5801	102	55.2	34	0.2	1.1	0.0			
	5830	96	58.3	32	0.2	0.5	0.1	87	56.3	92
	5844	*110	56.6	36	0.4	2.5	0.0	85	53.2	98
	5855	108	56.9	38	0.2	0.5	0.0	*91	54.2	*100
Kratz	WD 112	97	56.6	36	0.9	1.6	0.0			
	WD 139	100	55.3	33	0.2	1.2	0.0			
Legacy	LW 860	97	57.9	36	0.2	4.0	0.0	86	55.1	92
	LW 862	102	56.9	37	0.2	2.1	0.0	79	54.2	91
	LW 870	105	58.3	35	1.2	1.9	0.0	88	55.4	97
	LW 1040	101	56.9	36	0.4	1.1	0.3			
	LW 1065	95	58.1	33	0.2	3.7	0.0			
	LW 1072	*109	57.8	33	0.5	1.8	0.0	78	55.1	94
	LW 1155	*113	55.8	32	0.2	0.3	0.0			
Pioneer	25R30	*110	57.8	31	0.2	0.3	0.1			
	25R34	*117	58.5	33	0.2	0.7	0.0			
	25R39	*112	57.3	33	1.5	0.3	0.0	79	52.1	96
	25R40	*113	55.8	31	0.2	0.1	0.1			
	25R47	*110	56.0	31	0.2	0.5	0.0	85	52.7	98

Table 9. continued

Brand	Entry	2011 means						2010 means		2-year mean yield (bu/a)
		Yield (bu/a)	Test wt. (lb/bu)	Height (in.)	Lodging (0–9)	Septoria[a] (0–10)	Powdery mildew[a] (0–10)	Yield (bu/a)	Test wt. (lb/bu)	
PIP	702	104	56.7	38	0.4	1.2	0.0			
	716	101	59.3	35	0.4	1.8	0.3			
	717	101	58.0	35	0.2	2.0	0.0	78	52.7	90
	719	91	58.0	33	0.7	1.4	0.0			
	723	102	57.6	35	0.2	2.5	0.1			
	728	107	56.7	35	0.5	1.3	0.3			
	729	*113	58.3	35	0.2	0.2	0.0	*98	55.1	*106
	730	107	55.6	30	0.4	0.3	0.1	*93	52.3	*100
	731	106	57.2	32	0.2	0.3	0.0			
	736	97	57.6	35	1.3	4.8	0.0			
	740	84	55.8	35	2.4	0.6	0.3			
	743	94	57.6	35	0.2	5.1	0.1			
	750	105	58.8	33	0.2	1.8	0.0			
	752	107	57.1	34	0.9	0.1	0.0	89	54.4	98
	756	105	58.6	37	0.2	3.3	0.0			
	760	107	58.0	37	0.2	2.2	0.1	87	53.9	97
	760-Cruiser	104	58.6	36	0.2	2.7	0.1	*91	54.5	98
	761	102	57.9	35	0.2	2.9	0.3	*96	54.1	99
	766	102	58.2	34	0.2	4.1	0.1			
	773	107	58.2	36	1.7	2.8	0.0			
	776	104	57.9	35	0.7	4.5	0.0			
	786	104	57.7	37	0.2	3.7	0.0			
Pro Seed Genetics	PRO 200	99	59.1	36	0.6	1.5	0.4	80	54.9	90
	PRO 220	88	59.0	35	0.2	0.7	0.6	77	56.6	83
	PRO 240	*110	57.9	36	0.2	2.5	0.1	85	53.2	98
	PRO Ex 260	105	56.1	33	2.6	0.3	0.0			
	PRO Ex 280	104	58.7	32	0.6	2.1	0.0			
	PRO Ex 320A	105	57.3	35	0.2	2.7	0.0	*91	55.1	98
	PRO Ex 360A	108	58.4	33	0.2	0.3	0.1	*92	55.2	*100
Pro Seed/Kratz	PRO 200-HMO	102	58.3	35	0.4	0.9	0.9			
	PRO 240-HMO	102	57.2	38	0.2	2.5	0.0			
Syngenta	Branson	*110	57.1	32	0.2	0.9	0.1	*96	53.8	*103
	OAKES	106	58.2	33	0.2	0.7	0.1			
	W1062	105	57.0	37	0.4	0.3	0.0			
	W1104	102	56.4	33	0.2	0.4	0.0	84	51.6	93
	W1566	103	56.0	38	0.2	0.5	0.0	87	51.9	95
Mean		102	57.6	34	0.5	1.4	0.1	86	54.3	95
LSD (.10)		8	1.4	2	0.9	1.5	0.5	7	1.8	6

[a] Disease severity was rated on a scale from 0 to 10 as defined in table 3.

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

Testing agencies

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.

Additional information

- 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) at learningstore.uwex.edu

  The Wisconsin Certified Seed Directory at wcia.wisc.edu

- For information on seed availability of public varieties, contact:

  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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Wisconsin Winter Wheat Performance Tests—2011 (A3868) R-08-2011