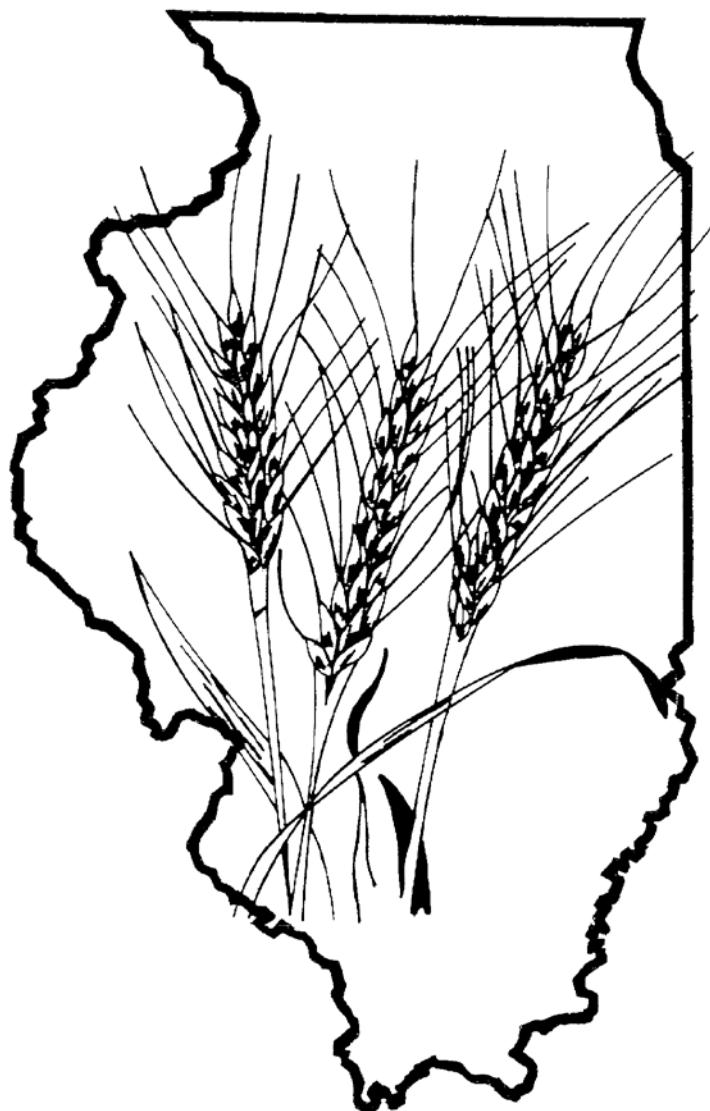


WHEAT PERFORMANCE IN ILLINOIS TRIALS – 2019



**Crop Sciences Special Report 2019-01
Department of Crop Sciences
University of Illinois
July 2019**

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The 2018-19 Illinois wheat crop was a fairly average one: yields were less than in recent years, and grain quality was generally acceptable. Planted acres for 2019 were 640,000, up from 600,000 acres in 2018, and harvested area was 590,000 acres, up from 560,000 acres in 2018. The 2019 Illinois wheat yield was 63 bushels per acre, down from 66 bushels per acre in 2018 and the record-high 76 bushels per acre in 2017.

Wheat planting in the fall of 2018 was delayed by wet weather: only 86% of the wheat crop emerged by November 25, and 54% of it was in good or excellent condition on that date. The crop overwintered without any serious issues; the good + excellent rating was 55% on April 7. April was cool and May was wet; the G+E crop condition rating fell to 40% by May 5 and fell further, to 30%, by June 2. Only 9% of the crop was headed by May 5, and 35% by May 12, compared to a 5-year average of 53% in that date. Only 87% of the crop was reported to have headed by June 2, compared to 95% averaged over the previous five years.

With May rainfall ranging from 25 to 50% above normal in most of southern Illinois, and more than twice normal in much of the northern half of the state, there were considerable fears that Fusarium head blight (FHB), or scab, would turn out to be a major problem. Frequent rain also made it difficult to apply fungicide at the right time. As it turned out, there was some FHB in many fields, but levels were not as high as had been feared, and there were few reports of market discounts due to high DON levels. Wet June weather brought harvest delays, however: only 47% of the Illinois wheat crop was harvested by the end of June, and it was the end of July before harvest was completed. Although FHB amounts were not high, test weights were in the mid-50s in many fields, likely due to some drying and rewetting as harvest was delayed.

The 2018-19 wheat variety trials were planted on time, but harvest was later than usual at most locations—see the table below. Plots were seeded at the rate of 36 seeds per square foot, and consisted of six, 7.5-inch rows trimmed to about 16 feet before harvest. Yields were corrected to 13.5% moisture. Entries treated with seed-applied insecticide have insecticide treatment identified by product trade name in the tables.

All trials were harvested in 2019, but data from Urbana and St. Peter (south-central IL) are not included in this because of high variability, mostly related to water damage. Lodging was rated at Hampshire, where heavy rain several days before harvest resulted in some lodging, but lodging did not affect yield, and also at Perry, where lodged varieties yielded a little less. It's not clear why some entries lodged at Perry, nor whether lower yields were directly related to lodging.

Location	Cooperator	Soil type	Planting		N	Harvest
			date	fertilizer		
Elkville	Trent Funk	Wynoose silt loam	Oct. 2	30 Fall	June 28	
				110 Spring		
Belleville	Ron Krausz	Ebbert silt loam	Oct. 9	30 Fall	June 28	
				85 Spring		
St Peter	Russ Schwarm	Wakeland silt loam	Oct. 9	0 Fall	July 2	
				120 Spring		
Perry/Orr Center	Mike Vose	Clarksdale silt loam	Oct. 2	30 Fall	July 8	
				80 Spring		
Urbana	Nick Eisenmenger	Flanagan silt loam	Oct. 3	30 Fall	July 10	
				40 Spring		
Hampshire	Dezeri DeRaedt	Octagon silt loam	Sept. 24	30 Fall 80 Spring	July 23	

Participating companies are listed on Page 2, regional data in Tables 1 and 2, individual location data in Tables 3 to 8, wheat variety characteristics in Table 9, and the Fusarium head scab ratings in Table 10.

Participating Companies

We thank these companies for their support of this program in 2019.

AgriMAXX Wheat Co
7167 Highbanks Rd
Mascoutah, IL 62258
(855) 629-9432

Green Valley Seed
121 West College St
Kahoka, MO 63445
(800) 748-7943

Limagrain Cereal Seeds
2040 SE Frontage Rd
Ft. Collins, CO 80525
(970) 498-2200

AgriPro
200 E 4th St
Hoffman, IL 62250
(618) 495-2617

GROWMARK, Inc.
1701 Towanda Ave., PO 2500
Bloomington, IL 61701
(309) 557-6399

Monier Seed & Service
846 Yankee Lane
Sparland, IL 61565
(309) 238-1227

BioTown Seeds
Box 299
Reynolds, IN 47980
(219) 984-6038

Hoffman Seed House
PO Box 66, 200 E 4th St
Hoffman, IL 62250
(618) 495-2617

Pioneer Hi-Bred Int'l Inc.
7100 NW 62nd Ave.
Johnston, IA 50131
(800) 247-6803

CROPLAN by Winfield
1050 CR F West/MS5850
Shoreview, MN 55126
www.winfield.com

Kitchen Seed Company
PO Box 286
Arthur, IL 61911
(217) 543-3476

Pro Seed Genetics
N 4297 City Hwy E
Kewaunee, WI 54216
(920) 988-2824

DeRaedt Seed Corp.
10 N 971 Tower Road
Hampshire, IL 60140
(847) 514-8844

Kratz Farms LLC
4380 Sherman Road
Slinger, WI 53086
(262) 644-9426

UniSouth Genetics, Inc.
3205C HWY 46 S
Dickson, TN 37055
(615) 515-3133

Dyna-Gro Seed
200 W 2nd St.
Flora, IL 44818
(618) 838-5024

KWS Cereals
4101 Colleen Dr
Champaign, IL 618/22
217-800-1008

GO Wheat
1530 HWY 79 South
Stuttgart, AR 72160
(800) 264-4433

Lewis Hybrids, Inc.
530 West Maple Ave.
Ursa, IL 62376
(217) 964-2131

Table 1. Southern Illinois regional wheat variety trial results, 2019

<u>Company</u>	<u>Variety</u>	<u>ST¹</u>	<u>Regional Average²</u>				<u>Elkville</u>		<u>Belleville</u>	
			<u>Yield</u> bu/ac	<u>Yield Rank</u> 1 to 66	<u>Test wt.</u> lb/bu	<u>Height</u> in.	<u>Yield</u> bu/ac	<u>Test wt.</u> lb/bu	<u>Yield</u> bu/ac	<u>Test wt.</u> lb/bu
AgriMAXX	444	C	87.2	37	56.5	35	96.2	58.3	78.2	54.6
AgriMAXX	454	C	88.4	33	54.1	34	107.6	59.3	69.2	49.0
AgriMAXX	463	C	86.4	40	55.0	33	97.3	55.9	75.6	54.1
AgriMAXX	473	C	85.3	45	56.3	36	97.2	57.7	73.4	55.0
AgriMAXX	475	C	90.7	23	56.2	34	107.5	57.3	73.8	55.1
AgriMAXX	485	C	76.8	64	56.3	34	91.0	59.0	62.7	53.6
AgriMAXX	486	C	93.4	8	54.9	36	104.3	58.2	82.6	51.6
AgriMAXX	495	C	90.1	26	55.0	35	100.6	56.9	79.6	53.1
AgriMAXX	Exp 1902	C	90.0	27	53.0	33	105.7	56.6	74.3	49.4
AgriMAXX	Exp 1905	C	81.1	57	55.4	37	89.4	58.9	72.8	51.9
AgriMAXX	Exp 1906	C	82.7	51	52.9	35	93.2	55.1	72.3	50.7
AgriMAXX	Exp 1913	C	85.1	46	57.8	35	97.2	60.9	73.0	54.6
AgriPro	SY 576	C	92.5	13	54.6	35	103.7	56.7	81.3	52.5
AgriPro	SY 100	C	91.5	17	55.0	33	106.9	55.3	76.0	54.7
AgriPro	SY 547	C	84.3	47	56.9	36	100.6	58.5	68.1	55.3
AgriPro	SY Viper	C	89.1	31	58.9	36	102.5	60.0	75.6	57.8
BioTown Seeds	Diener 491W		89.8	28	56.5	35	102.7	58.8	76.8	54.1
BioTown Seeds	Diener 497W		86.4	42	54.2	34	92.4	57.8	80.4	50.5
BioTown Seeds	Diener D510W		81.6	56	54.3	34	93.8	58.3	69.4	50.3
BioTown Seeds	Diener XW1902W		83.3	49	56.7	36	98.0	57.5	68.6	55.9
Croplan	CP8550	G	82.4	53	55.1	36	96.2	57.9	68.7	52.4
Croplan	CP8800	G	87.1	38	54.3	36	101.7	59.6	72.6	49.0
Croplan	CP9415	G	92.7	12	53.6	34	109.3	56.9	76.1	50.2
Croplan	CP9606	G	100.2	1	54.7	35	112.3	58.4	88.1	51.1
Dyna-Gro	9522	G	94.7	6	56.5	34	107.4	58.9	82.0	54.1
Dyna-Gro	9701	G	88.3	34	57.1	36	98.1	59.8	78.5	54.4
Dyna-Gro	9750	G	86.1	43	54.9	33	100.3	55.0	71.8	54.7
Dyna-Gro	9862	G	79.2	59	54.8	34	88.7	55.6	69.7	54.0
Dyna-Gro	9932	G	92.5	14	57.4	35	106.7	59.0	78.3	55.8
Dyna-Gro	9941	G	89.3	30	53.8	35	94.7	55.6	84.0	51.9
Dyna-Gro	9980	G	83.1	50	57.7	32	89.9	59.5	76.4	55.9
Dyna-Gro	WX18416	G	90.4	25	55.3	36	106.0	59.0	74.7	51.6
Dyna-Gro	WX19713	G	89.7	29	56.7	36	99.8	60.2	79.6	53.3
Dyna-Gro	WX19714	G	82.0	54	53.5	34	98.9	56.0	65.1	51.1
Go Wheat	2058	C	85.8	44	56.9	31	100.4	59.3	71.1	54.4
Go Wheat	EXP18-1	C	78.9	60	54.9	34	85.9	57.4	72.0	52.4
Go Wheat	EXP18-2	C	87.4	36	54.8	34	102.0	58.4	72.7	51.1
GROWMARK	FS 599	C	86.7	39	56.3	33	94.1	58.6	79.3	54.1
GROWMARK	FS 601	C	81.9	55	52.3	33	97.9	54.7	65.8	49.8
GROWMARK	FS 603	C	92.0	15	56.1	34	111.5	59.5	72.5	52.6
GROWMARK	FS 604	C	86.4	41	57.3	35	98.2	59.9	74.6	54.6
GROWMARK	FS 615	C	96.2	4	54.4	34	109.7	57.7	82.7	51.0
GROWMARK	FS 624	C	91.2	18	55.0	36	105.7	57.7	76.6	52.2
GROWMARK	WX19A	C	95.1	5	55.8	36	104.3	57.6	85.9	54.0
GROWMARK	WX19B	C	90.5	24	55.7	34	108.1	59.3	73.0	52.0
Hoffman Seed	H7W15		88.6	32	57.3	35	104.1	60.0	73.1	54.5
Hoffman Seed	H7W16		76.9	63	56.8	33	84.4	59.7	69.3	53.9
Hoffman Seed	H7W19		90.8	22	51.0	36	102.8	53.2	78.8	48.8
Hoffman Seed	H7W28		78.5	62	56.6	33	92.0	60.5	65.0	52.8
Kitchen Seed Company	KSC 416	G	88.0	35	57.8	35	102.5	59.8	73.5	55.7
Kitchen Seed Company	KSC 417	G	91.5	16	56.9	37	102.6	59.2	80.5	54.7
Kitchen Seed Company	KSC 418	G	91.1	19	55.7	37	103.4	57.4	78.7	53.9
KWS Cereals	KWS19X03	C	82.7	52	56.0	32	99.4	57.7	66.0	54.3
KWS Cereals	KWS19X07	C	99.0	2	56.9	35	106.0	60.2	92.0	53.6
KWS Cereals	KWS19X09	C	93.2	10	53.6	35	113.2	57.0	73.2	50.2
LCS	AMMO		76.3	65	56.2	34	82.3	57.9	70.3	54.4
Limagrain	L11548	G	92.8	11	55.0	36	106.8	56.8	78.7	53.1
Limagrain	L11713	G	79.6	58	56.6	35	97.8	58.3	61.4	55.0
Pioneer	25R61	C	96.9	3	56.2	36	111.3	58.8	82.4	53.7
Pioneer	25R74	C	93.5	7	54.0	32	105.6	55.5	81.4	52.4
Pioneer	25R77	C	93.2	9	57.1	33	106.6	57.5	79.9	56.6
ProHarvest	286	G	78.7	61	56.7	34	83.0	58.8	74.4	54.7
ProHarvest	317	G	74.5	66	56.3	34	90.2	57.9	58.9	54.7
USG	3329	G	90.8	21	55.7	35	101.8	58.8	79.8	52.6
USG	3404	G	90.9	20	53.9	35	106.3	56.3	75.5	51.5
USG	3536	G	84.2	48	55.7	36	95.4	57.4	73.0	54.0
	Trial Mean		87.1		55.6	34	99.6	58.0	74.7	53.3
	LSD, 10%		6.1		1.8	1	8.6	2.9	8.2	3.1
	CV, %		10.4		4.8	6	6.4	3.7	8.1	4.3

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide and E= Escalate+Fungicide.²St. Peter (formerly Neoga) trial was not included in the Southern region table, due to excessive water standing on the plots.

Table 2. Northern Illinois regional wheat variety trial results, 2019

Company	Variety	ST ¹	Regional Average ³			Height in.	Perry			Hampshire		
			Yield bu/ac	Yield Rank 1 to 63	Test wt. lb/bu		Yield bu/ac	Test wt. lb/bu	² Ldg. 0 to 9	Yield bu/ac	Test wt. lb/bu	² Ldg. 0 to 9
AgriMAXX	413	C	107.1	33	54.5	36	102.4	52.7	0.7	111.9	56.3	0.3
AgriMAXX	438	C	104.2	53	57.0	40	92.7	56.2	2.3	115.7	57.8	3.7
AgriMAXX	444	C	104.8	48	56.4	38	91.3	55.6	1.7	118.2	57.2	1.3
AgriMAXX	463	C	108.4	26	58.9	38	97.0	56.1	3.0	119.8	61.7	5.7
AgriMAXX	473	C	111.0	12	57.8	39	104.2	56.1	0.0	117.7	59.4	4.3
AgriMAXX	475	C	110.2	19	59.3	36	102.4	57.9	1.3	118.0	60.7	1.3
AgriMAXX	485	C	104.6	51	58.4	38	94.3	56.3	5.0	114.9	60.5	6.0
AgriMAXX	486	C	110.8	15	56.6	38	98.4	54.0	1.0	123.2	59.1	3.3
AgriMAXX	495	C	113.7	4	59.3	39	110.5	56.8	1.0	116.9	61.7	4.0
AgriMAXX	Exp 1902	C	104.3	52	57.2	37	96.0	55.4	1.3	112.7	58.9	5.0
AgriMAXX	Exp 1905	C	106.0	40	58.3	39	93.0	56.7	4.0	119.0	59.9	4.0
AgriPro	SY 576	C	110.5	17	57.0	38	99.2	56.1	0.0	121.8	57.8	1.3
AgriPro	SY 100	C	106.4	37	57.1	37	92.2	55.0	1.7	120.7	59.1	1.7
AgriPro	SY 547	C	106.9	35	57.6	40	91.7	55.7	3.3	122.1	59.4	0.0
AgriPro	SY Viper	C	111.9	9	59.9	41	103.5	57.3	1.3	120.4	62.5	1.3
DeRaedt Seed	DeRaedt 11	G	105.8	42	56.3	37	102.5	53.5	1.3	109.1	59.1	1.0
DeRaedt Seed	DeRaedt 17	C	107.8	29	58.7	36	96.3	57.7	1.7	119.3	59.7	4.3
DeRaedt Seed	DeRaedt 24	C	112.8	7	58.8	39	101.9	57.7	1.0	123.7	59.8	2.7
Dyna-Gro	9701	G	111.4	11	58.5	40	107.8	55.2	0.3	114.9	61.7	6.7
Dyna-Gro	9862	G	102.9	56	57.0	36	89.2	56.5	4.3	116.7	57.4	6.0
Dyna-Gro	9932	G	109.7	22	59.3	38	99.1	56.1	1.3	120.3	62.5	4.3
Dyna-Gro	9941	G	106.3	38	55.3	37	96.4	55.0	2.3	116.2	55.5	5.7
Dyna-Gro	WX19711	G	107.2	32	59.4	32	100.0	57.6	0.3	114.5	61.2	4.0
Green Valley	67X		113.3	5	57.5	37	104.6	57.5	0.0	122.1	57.5	2.3
Green Valley	68X		112.7	8	56.6	39	104.8	54.0	3.0	120.6	59.2	6.7
Green Valley	GV 619		115.2	2	59.4	38	108.1	57.8	1.7	122.3	61.0	5.3
Green Valley	GV 658		105.2	46	57.8	38	95.1	57.2	2.3	115.2	58.4	5.3
Green Valley	GV 668		113.0	6	59.2	39	108.9	57.9	2.3	117.1	60.6	3.7
Green Valley	GV 679		108.0	28	59.5	37	98.6	56.3	3.3	117.3	62.6	6.3
GROWMARK	FS 599	C	105.7	43	60.2	36	95.7	59.2	0.7	115.8	61.3	2.7
GROWMARK	FS 601	C	104.8	49	57.5	38	102.2	55.4	2.7	107.3	59.6	6.7
GROWMARK	FS 603	C	114.0	3	57.9	37	106.5	57.8	3.3	121.5	58.0	3.3
GROWMARK	FS 604	C	100.4	60	58.1	39	89.5	56.9	7.0	111.4	59.3	5.7
GROWMARK	FS 615	C	110.6	16	57.6	38	104.3	56.1	0.3	116.8	59.2	1.3
GROWMARK	FS 624	C	106.2	39	58.3	40	96.2	56.8	1.0	116.2	59.8	4.0
GROWMARK	WX19A	C	110.9	13	58.2	40	105.1	57.5	0.3	116.6	58.9	2.3
GROWMARK	WX19B	C	103.8	54	57.3	37	94.1	54.7	1.3	113.4	59.9	5.0
Kitchen Seed Company	KSC 416	G	107.0	34	58.9	38	96.2	57.0	5.3	117.8	60.7	5.3
Kitchen Seed Company	KSC 417	G	107.5	31	57.6	39	98.7	53.8	1.7	116.2	61.3	1.0
Kitchen Seed Company	KSC 418	G	108.1	27	57.0	40	98.2	55.6	2.3	117.9	58.3	1.0
Kratz Farms	KF 15241	C	105.1	47	58.3	40	97.4	56.3	1.3	112.9	60.2	4.3
Kratz Farms	KF 15334	C	97.7	63	58.9	41	88.5	57.8	3.7	106.9	60.0	6.3
Kratz Farms	KF 15639	C	109.3	24	59.0	42	102.1	54.7	2.3	116.5	63.2	2.0
Kratz Farms	KF 553	C	98.7	62	58.9	39	93.1	56.7	2.7	104.3	61.1	5.0
Kratz Farms	KF 667	C	104.7	50	57.8	38	92.5	56.4	4.0	116.9	59.2	7.0
Kratz Farms	KF 727	C	102.0	59	57.6	39	97.5	56.3	1.3	106.5	58.9	1.0
KWS Cereals	KWS19X03	C	111.7	10	55.6	35	92.1	54.0	1.7	131.2	57.1	3.0
KWS Cereals	KWS19X07	C	103.1	55	57.9	38	93.4	56.2	0.3	112.8	59.6	5.7
KWS Cereals	KWS19X09	C	105.3	45	59.1	38	103.2	56.7	1.7	107.4	61.5	3.3
LEWIS	828	C	102.1	58	57.4	38	88.0	53.3	1.0	116.1	61.4	1.0
LEWIS	829	C	110.5	18	56.5	40	99.7	53.1	0.7	121.2	59.9	0.7
LEWIS	833	C	99.8	61	57.7	39	90.9	55.8	0.0	108.7	59.6	1.0
LEWIS	839	C	109.8	21	59.9	40	102.2	56.9	0.3	117.4	62.8	1.7
LEWIS	851	C	106.6	36	58.4	40	100.8	56.2	0.7	112.5	60.7	2.7
Limagrain	L11719	G	107.7	30	57.9	37	99.4	55.7	1.7	115.9	60.2	5.3
Monier Seed	MW857	G	109.6	23	56.6	41	99.7	54.9	2.7	119.5	58.2	3.7
Pioneer	25R25	C	109.3	25	57.9	37	101.9	57.2	1.3	116.6	58.7	1.3
Pioneer	25R40	C	109.9	20	57.1	36	100.2	54.2	0.7	119.6	60.1	2.7
Pioneer	25R61	C	118.9	1	56.9	39	108.1	56.1	1.0	129.6	57.8	2.3
Pioneer	25R74	C	110.8	14	56.0	37	99.9	53.3	1.0	121.8	58.8	5.3
ProHarvest	286	G	102.1	57	60.2	38	96.3	58.0	3.3	107.9	62.4	3.7
ProHarvest	317	G	105.5	44	57.8	37	91.5	54.6	1.3	119.6	61.0	5.3
ProSeed Genetics	PRO 410		106.0	41	58.1	39	91.5	55.5	4.0	120.5	60.6	5.0
		Trial Mean	107.2		58.0	38	98.1	56.3	2.0	116.4	59.8	3.7
		LSD, 10%	5.5		1.7	2	7.7	2.6		9.4	2.5	
		CV, %	7.7		4.3	6	5.8	3.5		6.0	3.1	

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide.

²Lodging score: 0= no lodging, 9= most all plants lodged.

³The Urbana location was not included in the regional table due to a significant amount of unexplained variation.

Table 3. Results of the 2019 wheat variety trial at Elkville, in far southcentral Illinois.

Company	Variety	ST¹	Yield			Test wt.	Height	2-yr avg	3-yr avg
			bu/ac	Rank	1 to 66			bu/ac	bu/ac
AgriMAXX	444	C	96.2	50	58.3	32	101.2	104.2	
AgriMAXX	454	C	107.6	8	59.3	32	107.4	111.2	
AgriMAXX	463	C	97.3	46	55.9	31	97.2	103.5	
AgriMAXX	473	C	97.2	47	57.7	33	95.5	100.1	
AgriMAXX	475	C	107.5	9	57.3	32	105.1	101.0	
AgriMAXX	485	C	91.0	58	59.0	33	95.7		
AgriMAXX	486	C	104.3	21	58.2	33	106.9		
AgriMAXX	495	C	100.6	34	56.9	33			
AgriMAXX	Exp 1902	C	105.7	19	56.6	29			
AgriMAXX	Exp 1905	C	89.4	61	58.9	35			
AgriMAXX	Exp 1906	C	93.2	55	55.1	33			
AgriMAXX	Exp 1913	C	97.2	47	60.9	33			
AgriPro	SY 100	C	106.9	11	55.3	30	107.7	106.2	
AgriPro	SY 547	C	100.6	35	58.5	34	97.8	97.0	
AgriPro	SY 576	C	103.7	24	56.7	32			
AgriPro	SY Viper	C	102.5	30	60.0	34			
BioTown Seeds	Diener 491W		102.7	27	58.8	33			
BioTown Seeds	Diener 497W		92.4	56	57.8	31	99.4		
BioTown Seeds	Diener D510W		93.8	54	58.3	32	100.6	107.6	
BioTown Seeds	Diener XW1902W		98.0	43	57.5	34			
Croplan	CP8550	G	96.2	49	57.9	33	98.0	100.5	
Croplan	CP8800	G	101.7	33	59.6	35			
Croplan	CP9415	G	109.3	6	56.9	31	110.9	108.6	
Croplan	CP9606	G	112.3	2	58.4	32	111.7	114.5	
Dyna-Gro	9522	G	107.4	10	58.9	31	103.5	108.0	
Dyna-Gro	9701	G	98.1	42	59.8	32	99.5	98.3	
Dyna-Gro	9750	G	100.3	37	55.0	31	98.3	102.7	
Dyna-Gro	9862	G	88.7	62	55.6	32	92.9	101.0	
Dyna-Gro	9932	G	106.7	13	59.0	33			
Dyna-Gro	9941	G	94.7	52	55.6	33			
Dyna-Gro	9980	G	89.9	60	59.5	30			
Dyna-Gro	WX18416	G	106.0	16	59.0	34			
Dyna-Gro	WX19713	G	99.8	38	60.2	35			
Dyna-Gro	WX19714	G	98.9	40	56.0	31			
Go Wheat	2058	C	100.4	36	59.3	29			
Go Wheat	EXP18-1	C	85.9	63	57.4	31			
Go Wheat	EXP18-2	C	102.0	31	58.4	32			
GROWMARK	FS 599	C	94.1	53	58.6	31			
GROWMARK	FS 601	C	97.9	44	54.7	31			
GROWMARK	FS 603	C	111.5	3	59.5	32	107.8		
GROWMARK	FS 604	C	98.2	41	59.9	32	95.7	99.8	
GROWMARK	FS 615	C	109.7	5	57.7	32	104.6	107.0	
GROWMARK	FS 624	C	105.7	18	57.7	33	105.9	105.7	
GROWMARK	WX19A	C	104.3	22	57.6	33			
GROWMARK	WX19B	C	108.1	7	59.3	34			
Hoffman Seed	H7W15		104.1	23	60.0	33	101.6	102.5	
Hoffman Seed	H7W16		84.4	64	59.7	32	89.8	95.4	
Hoffman Seed	H7W19		102.8	26	53.2	35			
Hoffman Seed	H7W28		92.0	57	60.5	29	102.2		
Kitchen Seed Company	KSC 416	G	102.5	29	59.8	33	97.1	99.4	
Kitchen Seed Company	KSC 417	G	102.6	28	59.2	33	101.3	96.0	
Kitchen Seed Company	KSC 418	G	103.4	25	57.4	35	102.2		
KWS Cereals	KWS19X03	C	99.4	39	57.7	30			
KWS Cereals	KWS19X07	C	106.0	17	60.2	33			
KWS Cereals	KWS19X09	C	113.2	1	57.0	32			
LCS	AMMO		82.3	66	57.9	32	90.8		
Limagrain	L11548	G	106.8	12	56.8	32	105.0		
Limagrain	L11713	G	97.8	45	58.3	32			
Pioneer	25R61	C	111.3	4	58.8	33	107.2	105.9	
Pioneer	25R74	C	105.6	20	55.5	29	106.8	104.5	
Pioneer	25R77	C	106.6	14	57.5	32	102.8	102.0	
ProHarvest	286	G	83.0	65	58.8	30			
ProHarvest	317	G	90.2	59	57.9	32			
USG	3329	G	101.8	32	58.8	33	99.8		
USG	3404	G	106.3	15	56.3	32	103.9	105.0	
USG	3536	G	95.4	51	57.4	33			
Trial Mean			99.6		58.0	32			
LSD, 10%			8.6		2.9	3			
CV, %			6.4		3.7	8			

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide, E= Escalate+Fungicide.

Pest management is carried out by the cooperator at this site. In 2019 this included Trivapro fungicide and Warrior insecticide on April 15th, and Prosaro fungicide and Warrior insecticide on May 20th.

Table 4. Results of the 2019 wheat variety trial at Belleville, in southwestern Illinois.

Company	Variety	ST¹	Yield bu/ac	Yield			2-yr avg 2018-19 bu/ac	3-yr avg 2017-19 bu/ac
				Rank 1 to 66	Test wt. lb/bu	Height in.		
AgriMAXX	444	C	78.2	23	54.6	37	83.8	87.3
AgriMAXX	454	C	69.2	56	49.0	36	75.9	77.6
AgriMAXX	463	C	75.6	30	54.1	35	74.2	81.3
AgriMAXX	473	C	73.4	38	55.0	39	76.5	75.9
AgriMAXX	475	C	73.8	36	55.1	36	70.2	75.5
AgriMAXX	485	C	62.7	64	53.6	35	71.9	
AgriMAXX	486	C	82.6	6	51.6	39		80.7
AgriMAXX	495	C	79.6	15	53.1	36		
AgriMAXX	Exp 1902	C	74.3	35	49.4	36		
AgriMAXX	Exp 1905	C	72.8	44	51.9	39		
AgriMAXX	Exp 1906	C	72.3	48	50.7	37		
AgriMAXX	Exp 1913	C	73.0	42	54.6	37		
AgriPro	SY 100	C	76.0	28	54.7	36	76.8	80.1
AgriPro	SY 547	C	68.1	59	55.3	38	73.6	74.4
AgriPro	SY 576	C	81.3	10	52.5	37		
AgriPro	SY Viper	C	75.6	29	57.8	38		
BioTown Seeds	Diener 491W		76.8	24	54.1	36		
BioTown Seeds	Diener 497W		80.4	12	50.5	36	81.8	
BioTown Seeds	Diener D510W		69.4	54	50.3	36	74.2	75.3
BioTown Seeds	Diener XW1902W		68.6	58	55.9	38		
Croplan	CP8550	G	68.7	57	52.4	39	71.1	74.4
Croplan	CP8800	G	72.6	46	49.0	37		
Croplan	CP9415	G	76.1	27	50.2	36	79.5	74.1
Croplan	CP9606	G	88.1	2	51.1	38	85.3	87.4
Dyna-Gro	9522	G	82.0	8	54.1	37	81.3	81.8
Dyna-Gro	9701	G	78.5	21	54.4	39	76.8	78.0
Dyna-Gro	9750	G	71.8	50	54.7	35	74.3	82.1
Dyna-Gro	9862	G	69.7	53	54.0	36	72.4	76.4
Dyna-Gro	9932	G	78.3	22	55.8	37		
Dyna-Gro	9941	G	84.0	4	51.9	36		
Dyna-Gro	9980	G	76.4	26	55.9	34		
Dyna-Gro	WX18416	G	74.7	32	51.6	37		
Dyna-Gro	WX19713	G	79.6	16	53.3	37		
Dyna-Gro	WX19714	G	65.1	62	51.1	37		
Go Wheat	2058	C	71.1	51	54.4	33		
Go Wheat	EXP18-1	C	72.0	49	52.4	37		
Go Wheat	EXP18-2	C	72.7	45	51.1	35		
GROWMARK	FS 599	C	79.3	17	54.1	35		
GROWMARK	FS 601	C	65.8	61	49.8	35		
GROWMARK	FS 603	C	72.5	47	52.6	36	71.3	
GROWMARK	FS 604	C	74.6	33	54.6	37	69.9	75.7
GROWMARK	FS 615	C	82.7	5	51.0	36	82.6	81.2
GROWMARK	FS 624	C	76.6	25	52.2	38	78.6	80.8
GROWMARK	WX19A	C	85.9	3	54.0	39		
GROWMARK	WX19B	C	73.0	43	52.0	34		
Hoffman Seed	H7W15		73.1	40	54.5	37	75.5	78.1
Hoffman Seed	H7W16		69.3	55	53.9	34	70.9	74.9
Hoffman Seed	H7W19		78.8	18	48.8	37		
Hoffman Seed	H7W28		65.0	63	52.8	36	72.8	
Kitchen Seed Company	KSC 416	G	73.5	37	55.7	37	70.5	74.0
Kitchen Seed Company	KSC 417	G	80.5	11	54.7	40	80.6	81.3
Kitchen Seed Company	KSC 418	G	78.7	19	53.9	39	76.5	
KWS Cereals	KWS19X03	C	66.0	60	54.3	34		
KWS Cereals	KWS19X07	C	92.0	1	53.6	37		
KWS Cereals	KWS19X09	C	73.2	39	50.2	37		
LCS	AMMO		70.3	52	54.4	36	67.8	
Limagrain	L11548	G	78.7	20	53.1	39	80.4	
Limagrain	L11713	G	61.4	65	55.0	37		
Pioneer	25R61	C	82.4	7	53.7	38	83.4	85.4
Pioneer	25R74	C	81.4	9	52.4	35	81.6	83.3
Pioneer	25R77	C	79.9	13	56.6	34	76.4	81.3
ProHarvest	286	G	74.4	34	54.7	37		
ProHarvest	317	G	58.9	66	54.7	36		
USG	3329	G	79.8	14	52.6	36	81.5	
USG	3404	G	75.5	31	51.5	37	78.1	78.8
USG	3536	G	73.0	41	54.0	39		
			Trial Mean		74.7	53.3	37	
			LSD, 10%		8.2	3.1	2	
			CV, %		8.1	4.3	3	

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide, E= Escalate+Fungicide.

Table 5. Results of the 2018 wheat variety trial at Neoga, in south central Illinois.

<u>Company</u>	<u>Variety</u>	ST ¹	Yield bu/ac	Yield			2-yr avg 2017-18 bu/ac	3-yr avg ³ 2016-18 bu/ac
				Rank 1 to 64	Test wt. lb/bu	Height in.		
AgriMAXX	444	C	80.5	43	55.4	33	97.0	99.2
AgriMAXX	446	C	85.1	24	59.1	32	100.2	99.2
AgriMAXX	454	C	89.5	6	55.7	36	98.4	83.7
AgriMAXX	463	C	80.6	42	56.5	33	100.9	102.1
AgriMAXX	473	C	83.7	31	57.3	35	102.8	
AgriMAXX	475	C	89.3	8	60.5	33	98.1	
AgriMAXX	480	C	80.3	45	59.7	34		
AgriMAXX	485	C	71.8	61	58.4	32		
AgriMAXX	486	C	78.1	53	60.6	35		
AgriMAXX	Exp 1884	C	85.6	21	54.7	34		
AgriMAXX	Exp 1892	C	89.2	9	58.3	31		
AgriPro	SY 100	C	81.3	38	55.1	32	96.6	
AgriPro	SY 547	C	78.3	52	60.0	35	96.7	93.3
Beck's Hybrids	Beck 726	E	84.1	28	55.6	34		
BioTown Seeds	D496W	C	71.4	62	56.2	33	89.9	92.3
BioTown Seeds	D497W	C	86.7	18	56.8	33		
BioTown Seeds	D498W	C	85.0	26	61.2	32		
BioTown Seeds	D510W	C	78.6	49	58.1	33	96.9	
BioTown Seeds	XW 1802	C	91.0	3	57.0	36		
Croplan	SRW 8550	G	88.7	10	59.0	36	104.3	
Croplan	SRW 9415	G	82.0	36	57.4	33	100.3	
Croplan	SRW 9606	G	89.5	7	56.2	33	95.1	
Dyna-Gro	9522	G	85.1	25	56.9	32	101.5	103.8
Dyna-Gro	9701	G	86.3	20	57.7	36	102.0	
Dyna-Gro	9750	G	80.2	46	55.0	34	98.6	
Dyna-Gro	9811	G	80.6	41	55.2	36		
Dyna-Gro	9862	G	76.3	58	55.8	34	93.2	
Dyna-Gro	WX17775	G	87.6	15	55.6	34		
Dyna-Gro	WX17778	G	86.6	19	59.1	31		
Dyna-Gro	WX18724	G	82.1	34	59.7	32		
GROWMARK	FS 603	C	84.0	29	59.3	32		
GROWMARK	FS 604	C	83.6	32	57.8	35	82.4	72.3
GROWMARK	FS 615	C	87.4	17	55.9	33	102.2	98.4
GROWMARK	FS 619	C	88.6	11	58.6	35	100.6	90.8
GROWMARK	FS 624	C	85.4	22	57.8	34	91.1	90.8
GROWMARK	WX18A	C	83.5	33	55.7	33		
GROWMARK	WX18B	C	88.6	11	58.3	32		
GROWMARK	WX18C	C	80.7	40	59.7	34		
Hoffman Seed	H7W15	C	84.5	27	59.8	34	94.1	89.1
Hoffman Seed	H7W16	C	79.2	48	60.9	30	93.9	
Hoffman Seed	H7W17	C	73.7	59	55.4	33	88.7	
Hoffman Seed	H7W18	C	97.2	1	58.2	34		
Hoffman Seed	H7W28	C	76.5	57	60.9	33		
Kitchen Seed Company	KSC 416	G	78.3	51	58.3	38	89.9	
Kitchen Seed Company	KSC 417	G	89.9	5	56.3	35	97.3	
Kitchen Seed Company	KSC 418	G	94.1	2	58.9	34		
LCS	AMMO		72.8	60	57.9	30		
Limagrain	L11548	C	90.8	4	54.9	35		
Limagrain	L11549	C	84.0	30	58.8	33		
Limagrain	L11617	C	77.1	55	58.6	30		
Limagrain	L11719	C	80.9	39	56.7	30		
Miller Bros Farm and Fert.	L214	G	78.6	50	55.6	35	90.6	
Miller Bros Farm and Fert.	L334	U	49.5	64	59.8	36		
Pioneer	Pioneer 25R61	C	79.8	47	55.3	35	96.1	
Pioneer	Pioneer 25R74	C	80.4	44	57.8	32	99.7	
Pioneer	Pioneer 25R77	C	76.6	56	57.1	31	93.9	96.5
USG	3118	C	71.1	63	58.6	31		
USG	3197	C	81.4	37	53.6	34	96.0	84.1
USG	3228	C	77.9	54	55.1	34	96.8	
USG	3329	C	85.3	23	56.1	34		
USG	3404	C	88.4	13	57.8	33	98.7	100.1
USG	3448	C	88.0	14	59.8	32	104.1	
Virginia Crop Impr. Assoc.	Hilliard	G	87.6	16	57.7	34	97.3	95.6
Virginia Crop Impr. Assoc.	VA12W-68	G	82.1	35	59.6	33	94.5	
Trial Mean			82.5		57.7	34		
LSD, 10%			5.9		2.4	2		
CV, %			5.3		3.0	3		

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide and E= Escalate+Fungicide.

Table 6. Results of the 2019 wheat variety trial at Perry, in western Illinois.

Company	Variety	ST¹	Yield				Lodging²	2-yr avg	3-yr avg
			Yield bu/ac	Rank 1 to 63	Test wt. lb/bu	Height in.		2018-19 bu/ac	2017-19 bu/ac
AgriMAXX	413	C	102.4	15	52.7	36	1	85.6	97.5
AgriMAXX	438	C	92.7	51	56.2	40	2	83.8	98.7
AgriMAXX	444	C	91.3	58	55.6	39	2		
AgriMAXX	463	C	97.0	37	56.1	36	3	78.9	91.7
AgriMAXX	473	C	104.2	11	56.1	38	0	88.1	
AgriMAXX	475	C	102.4	16	57.9	38	1	88.8	96.7
AgriMAXX	485	C	94.3	46	56.3	37	5	79.9	
AgriMAXX	486	C	98.4	33	54.0	37	1	83.2	
AgriMAXX	495	C	110.5	1	56.8	38	1		
AgriMAXX	Exp 1902	C	96.0	43	55.4	37	1		
AgriMAXX	Exp 1905	C	93.0	50	56.7	39	4		
AgriPro	SY 100	C	92.2	53	55.0	36	2	71.8	88.6
AgriPro	SY 547	C	91.7	55	55.7	40	3	79.5	82.8
AgriPro	SY 576	C	99.2	29	56.1	38	0		
AgriPro	SY Viper	C	103.5	12	57.3	41	1		
DeRaedt Seed	DeRaedt 11	G	102.5	14	53.5	37	1	86.9	98.7
DeRaedt Seed	DeRaedt 17	C	96.3	39	57.7	36	2		
DeRaedt Seed	DeRaedt 24	C	101.9	21	57.7	39	1		
Dyna-Gro	9701	G	107.8	5	55.2	40	0	89.9	95.5
Dyna-Gro	9862	G	89.2	61	56.5	36	4	77.8	88.1
Dyna-Gro	9932	G	99.1	30	56.1	37	1		
Dyna-Gro	9941	G	96.4	38	55.0	38	2		
Dyna-Gro	WX19711	G	100.0	24	57.6	27	0		
Green Valley	67X		104.6	9	57.5	38	0		
Green Valley	68X		104.8	8	54.0	38	3		
Green Valley	GV 619		108.1	4	57.8	39	2		
Green Valley	GV 658		95.1	45	57.2	38	2	84.4	
Green Valley	GV 668		108.9	2	57.9	38	2	84.7	
Green Valley	GV 679		98.6	32	56.3	36	3		
GROWMARK	FS 599	C	95.7	44	59.2	37	1		
GROWMARK	FS 601	C	102.2	18	55.4	39	3		
GROWMARK	FS 603	C	106.5	6	57.8	37	3	86.5	
GROWMARK	FS 604	C	89.5	60	56.9	38	7	79.7	89.4
GROWMARK	FS 615	C	104.3	10	56.1	38	0	90.0	99.7
GROWMARK	FS 624	C	96.2	41	56.8	40	1	82.8	91.5
GROWMARK	WX19A	C	105.1	7	57.5	41	0		
GROWMARK	WX19B	C	94.1	47	54.7	37	1		
Kitchen Seed Company	KSC 416	G	96.2	42	57.0	38	5	82.4	92.4
Kitchen Seed Company	KSC 417	G	98.7	31	53.8	40	2	84.5	91.0
Kitchen Seed Company	KSC 418	G	98.2	34	55.6	39	2	87.9	
Kratz Farms	KF 15241	C	97.4	36	56.3	40	1		
Kratz Farms	KF 15334	C	88.5	62	57.8	40	4	68.3	
Kratz Farms	KF 15639	C	102.1	19	54.7	42	2	83.4	
Kratz Farms	KF 553	C	93.1	49	56.7	39	3		
Kratz Farms	KF 667	C	92.5	52	56.4	37	4		
Kratz Farms	KF 727	C	97.5	35	56.3	39	1	81.8	
KWS Cereals	KWS19X03	C	92.1	54	54.0	36	2		
KWS Cereals	KWS19X07	C	93.4	48	56.2	38	0		
KWS Cereals	KWS19X09	C	103.2	13	56.7	38	2		
LEWIS	828	C	88.0	63	53.3	39	1	72.7	87.4
LEWIS	829	C	99.7	26	53.1	40	1		
LEWIS	833	C	90.9	59	55.8	41	0	74.3	86.0
LEWIS	839	C	102.2	17	56.9	40	0	80.5	90.2
LEWIS	851	C	100.8	22	56.2	39	1	83.2	
Limagrain	L11719	G	99.4	28	55.7	37	2		
Monier Seed	MW857	G	99.7	27	54.9	41	3		
Pioneer	25R25	C	101.9	20	57.2	37	1	83.8	96.1
Pioneer	25R40	C	100.2	23	54.2	36	1	83.4	96.3
Pioneer	25R61	C	108.1	3	56.1	38	1	91.5	99.4
Pioneer	25R74	C	99.9	25	53.3	36	1	81.8	92.0
ProHarvest	286	G	96.3	40	58.0	37	3		
ProHarvest	317	G	91.5	57	54.6	37	1		
ProSeed Genetics	PRO 410		91.5	56	55.5	39	4	84.1	94.0
			Trial Mean	98.1	56.3	38	2		
			LSD, 10%	7.7	2.6	3			
			CV, %	5.8	3.5	6			

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide.

² Lodging- 0 no plants lodged, 9 all plants lodged.

Table 7. Results of the 2018 wheat variety trial at Urbana, in east central Illinois.

<u>Company</u>	<u>Variety</u>	ST ¹	Yield bu/ac	Yield			Height in.	2-yr avg 2017-18 bu/ac	3-yr avg 2016-18 bu/ac
				Rank 1 to 51	Ldg. ² 0 to 5	Test wt. lb/bu			
AgriMAXX	413	C	102.9	9	0	56.4	35	97.0	104.6
AgriMAXX	438	C	102.4	11	1	56.9	36	97.2	101.5
AgriMAXX	463	C	91.6	47	0	55.4	34	85.7	94.7
AgriMAXX	473	C	97.3	29	1	57.3	35		
AgriMAXX	475	C	99.3	22	0	58.5	33	93.9	
AgriMAXX	485	C	97.4	28	0	56.5	32		
AgriMAXX	486	C	95.2	37	1	56.9	35		
AgriMAXX	Exp 1884	C	93.7	41	2	56.5	33		
AgriMAXX	Exp 1892	C	101.4	15	0	58.3	31		
AgriMAXX	Exp 1899	C	109.6	5	2	58.9	33		
AgriPro	SY 100	C	98.6	23	2	53.3	33	98.5	104.1
AgriPro	SY 547	C	102.9	10	0	58.3	36	91.9	93.8
Albert Lea Seed	LCS3204		96.1	32	0	57.9	37		
DeRaedt Seed	DeRaedt 11		100.1	20	0	55.4	33	94.7	98.6
Dyna-Gro	9552	G	104.4	8	0	56.5	32	96.4	98.8
Dyna-Gro	9701	G	97.2	31	2	57.0	35	87.4	
Dyna-Gro	9750	G	92.8	44	0	56.0	34	85.0	
Dyna-Gro	9862	G	91.2	49	0	57.4	32	83.7	
Dyna-Gro	WX17775	G	95.7	35	0	55.1	33		
Dyna-Gro	WX18724	G	100.3	18	2	57.5	34		
Green Valley	628	C	93.4	42	3	57.8	34		
Green Valley	658	C	98.3	25	2	56.2	36		
Green Valley	65X	C	101.3	17	0	57.3	32		
Green Valley	668	C	102.1	13	3	56.0	35		
Green Valley	66X	C	98.2	26	1	57.4	35		
GROWMARK	FS 603	C	94.5	38	0	58.8	33		
GROWMARK	FS 604	C	104.7	7	4	58.0	35	96.1	97.4
GROWMARK	FS 615	C	101.3	16	0	58.2	33	95.3	98.0
GROWMARK	FS 619	C	85.0	51	0	58.7	35	88.6	94.4
GROWMARK	FS 624	C	99.7	21	0	56.6	34	91.7	98.0
GROWMARK	WX18A	C	92.1	46	2	52.4	34		
GROWMARK	WX18B	C	100.2	19	1	59.4	32		
GROWMARK	WX18C	C	111.4	3	2	58.8	34		
Kitchen Seed Company	KSC 416	G	96.1	33	0	52.5	38	89.5	
Kitchen Seed Company	KSC 417	G	101.6	14	0	51.2	34	93.0	
Kitchen Seed Company	KSC 418	G	92.2	45	4	55.0	35		
Kratz Farms	KF 727	C	95.5	36	0	55.0	34		
Kratz Farms	KF 15144	C	97.3	30	0	59.0	35		
Kratz Farms	KF 15334	C	91.2	48	3	59.3	37		
Kratz Farms	KF 15639	C	96.0	34	1	57.6	38		
LEWIS	Lewis 851	C	90.7	50	0	57.0	36		
LEWIS	Lewis 828	C	102.2	12	1	58.2	34	93.8	94.3
LEWIS	Lewis 833	C	93.9	40	1	60.5	34	88.0	
LEWIS	Lewis 839	C	97.8	27	2	58.3	36	93.9	100.0
Martin Seeds, Inc.	M18		93.2	43	0	58.2	33		
Pioneer	Pioneer 25R25	C	111.9	1	0	55.2	33	99.9	102.2
Pioneer	Pioneer 25R40	C	98.6	23	0	56.5	33	90.9	98.5
Pioneer	Pioneer 25R61	C	111.2	4	2	57.5	36	101.0	
Pioneer	Pioneer 25R74	C	111.5	2	0	59.0	32	100.2	
ProSeed Genetics	PRO 320A		93.9	39	1	56.6	37		
ProSeed Genetics	PRO 410		105.7	6	2	56.4	37	96.4	97.1
	Trial Mean		98.3			56.9	34		
	LSD, 10%		6.0			3.9	2		
	CV, %		4.5			5.1	4		

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide.

Table 8. Results of the 2019 wheat variety trial at Hampshire, in north central Illinois.

<u>Company</u>	<u>Variety</u>	ST ¹	Yield		Test wt.	Height	Lodging ²	2-yr avg		3-yr avg	
			bu/ac	Rank 1 to 63				bu/ac	2018-19	bu/ac	2017-19
AgriMAXX	413	C	111.9	54	56.3	35	0	107.8		110.1	
AgriMAXX	438	C	115.7	44	57.8	39	4		98.5		105.5
AgriMAXX	444	C	118.2	23	57.2	36	1				
AgriMAXX	463	C	119.8	17	61.7	40	6	110.4		109.0	
AgriMAXX	473	C	117.7	27	59.4	39	4	109.3			
AgriMAXX	475	C	118.0	24	60.7	34	1	113.9		108.2	
AgriMAXX	485	C	114.9	47	60.5	38	6	105.4			
AgriMAXX	486	C	123.2	4	59.1	38	3	108.1			
AgriMAXX	495	C	116.9	32	61.7	39	4				
AgriMAXX	Exp 1902	C	112.7	52	58.9	36	5				
AgriMAXX	Exp 1905	C	119.0	22	59.9	39	4				
AgriPro	SY 100	C	120.7	12	59.1	37	2	108.1		111.2	
AgriPro	SY 547	C	122.1	6	59.4	40	0	111.3		112.1	
AgriPro	SY 576	C	121.8	8	57.8	38	1				
AgriPro	SY Viper	C	120.4	15	62.5	40	1				
DeRaedt Seed	DeRaedt 11	G	109.1	56	59.1	36	1	103.3		109.2	
DeRaedt Seed	DeRaedt 17	C	119.3	21	59.7	36	4				
DeRaedt Seed	DeRaedt 24	C	123.7	3	59.8	39	3				
Dyna-Gro	9701	G	114.9	46	61.7	39	7	109.5		110.4	
Dyna-Gro	9862	G	116.7	34	57.4	36	6	110.5		111.8	
Dyna-Gro	9932	G	120.3	16	62.5	38	4				
Dyna-Gro	9941	G	116.2	39	55.5	36	6				
Dyna-Gro	WX19711	G	114.5	48	61.2	36	4				
Green Valley	67X		122.1	7	57.5	35	2				
Green Valley	68X		120.6	13	59.2	40	7				
Green Valley	GV 619		122.3	5	61.0	37	5				
Green Valley	GV 658		115.2	45	58.4	37	5	107.0			
Green Valley	GV 668		117.1	30	60.6	39	4	114.8			
Green Valley	GV 679		117.3	29	62.6	37	6				
GROWMARK	FS 599	C	115.8	43	61.3	35	3				
GROWMARK	FS 601	C	107.3	60	59.6	37	7				
GROWMARK	FS 603	C	121.5	10	58.0	36	3	115.2			
GROWMARK	FS 604	C	111.4	55	59.3	40	6	107.5		102.9	
GROWMARK	FS 615	C	116.8	33	59.2	37	1	111.2		114.3	
GROWMARK	FS 624	C	116.2	40	59.8	39	4	108.9		107.5	
GROWMARK	WX19A	C	116.6	35	58.9	38	2				
GROWMARK	WX19B	C	113.4	49	59.9	37	5				
Kitchen Seed Company	KSC 416	G	117.8	26	60.7	38	5	104.2		107.2	
Kitchen Seed Company	KSC 417	G	116.2	38	61.3	38	1	102.3		105.4	
Kitchen Seed Company	KSC 418	G	117.9	25	58.3	40	1	105.4			
Kratz Farms	KF 15241	C	112.9	50	60.2	39	4				
Kratz Farms	KF 15334	C	106.9	61	60.0	41	6	89.5			
Kratz Farms	KF 15639	C	116.5	37	63.2	41	2	112.9			
Kratz Farms	KF 553	C	104.3	63	61.1	38	5				
Kratz Farms	KF 667	C	116.9	31	59.2	38	7				
Kratz Farms	KF 727	C	106.5	62	58.9	38	1	104.4			
KWS Cereals	KWS19X03	C	131.2	1	57.1	34	3				
KWS Cereals	KWS19X07	C	112.8	51	59.6	37	6				
KWS Cereals	KWS19X09	C	107.4	59	61.5	38	3				
LEWIS	828	C	116.1	41	61.4	37	1	105.8		104.0	
LEWIS	829	C	121.2	11	59.9	39	1				
LEWIS	833	C	108.7	57	59.6	36	1	103.5		104.1	
LEWIS	839	C	117.4	28	62.8	40	2	107.9		105.1	
LEWIS	851	C	112.5	53	60.7	40	3	99.0			
Limagrain	L11719	G	115.9	42	60.2	37	5				
Monier Seed	MW857	G	119.5	20	58.2	40	4				
Pioneer	25R25	C	116.6	36	58.7	37	1	108.6		110.5	
Pioneer	25R40	C	119.6	19	60.1	35	3	113.0		113.9	
Pioneer	25R61	C	129.6	2	57.8	39	2	114.6		116.0	
Pioneer	25R74	C	121.8	9	58.8	37	5	111.6		109.0	
ProHarvest	286	G	107.9	58	62.4	38	4				
ProHarvest	317	G	119.6	18	61.0	36	5				
ProSeed Genetics	PRO 410		120.5	14	60.6	38	5	116.8		112.8	
	Trial Mean		116.4		59.8	38	4				
	LSD, 10%		9.4		2.5	2					
	CV, %		6.0		3.1	4					

¹ST- Seed Treatment: C= Cruiser+Fungicide, F= Fungicide, G= Gaucho+Fungicide.

² Lodging- 0 no plants lodged, 9 all plants lodged.

Table 9. Agronomic characteristics of wheat varieties sold in Illinois. Descriptions of private varieties are provided by companies. See the bottom of the table (second page) for codes.

<u>Origin</u>	<u>Variety</u>	<u>Type</u>	<u>Maturity</u>	<u>Head type</u>	<u>Winter-hardiness</u>	<u>Plant height</u>	<u>Standability</u>	<u>Hessian fly</u>	<u>Leaf rust</u>	<u>Septoria</u>
AgriMAXX	413	V	E	B	E	S	E	S	MR	MR
	438	V	ML	S	E	MT	VG	S	I	I
	444	V	M	B	E	MT	VG	S	I	I
	454	V	M	B	E	M	E	S	I	MR
	463	V	E	S	E	M	E	S	MR	MR
	473	V	E	B	VG	M	E	S	MR	MR
	475	V	M	B	VG	M	E	S	I	I
	485	V	M	S	E	M	E	R	I	MR
	486	V	ML	B	VG	M	VG	R	I	MR
	495	V	M	B	VG	M	VG	R	MR	MR
	Exp 1902	V	M	B	VG	M	E	S	MR	MR
	Exp 1905	V	ME	S	VG	M	VG	S	I	I
	Exp 1906	V	E	B	E	MS	E	S	MR	MR
	Exp 1913	V	E	B	VG	M	E	S	R	MR
AgriPro	SY 576	V	ML	B	E		E		R	
	SY 100	V	ML	S	E	S	E	S	MS	
	SY 547	V	ME	S	E	T	VG	S	MR	
	SY Viper	V	M	S	G	T	G	S	MS	
Bio Town Seeds	Diener 491W	V	ME	B	VG	S	E	I	MS	I
	Diener 497W	V	ME	B	VG	S	E	MR	R	R
	Diener 510W	V	ML	S	VG	S	VG	MS	R	R
	Diener XW1902W	V	E	S	VG	M	VG	MR	R	R
Croplan	CP9606	V	M	B	E	M	E	R	MR	MR
	CP9415	V	M	B	E	M	E	R	MR	MR
	CP8550	V	M	B	E	MT	VG	R	MR	MR
	CP8800	V	M	B	E	MT	E	R	MR	MR
DeRaedt Seed	11	V	ME	B	E	MT	E	S	I	MR
	17	V	M	B	E	M	E	S	MR	MR
	24	V	M	B	E	MT	E	R	E	MR
Dyna-Gro Seed	9522	V	ML	B	VG	M	G	S	R	MR
	9701	V	ME	B	VG	T	VG	R	MR	MR
	9750	V	E	S	E	S	E	S	R	R
	9862	V	M	S	E	M	VG	R	MR	MR
	9932	V	M	B	VG	M	VG	R	MR	MR
	9941	V	M	B	VG	M	VG	R	MR	MR
	9980	V	E	B	VG	S	G	R	R	MR
	WX18416	V	M	B	VG	T	G	R	MR	MR
	WX19711	V	M	B	VG	S	E	n/a	MR	MR
	WX19713	V	ME	B	VG	M	VG	n/a	MR	MR
	WX19714	V	M	B	VG	M	VG	n/a	MR	MR
Green Valley	GV 619	V	E	B	E	M	VG	I	I	I
	GV 658	V	ME	B	G	M	VG	I	I	I
	GV 668	V	M	B	E	M	E	I	I	I
	GV 679	V	ML	S	G	M	E	I	I	I
	67X	V	M	B	G	M	VG	I	I	I
	68X	V	ML	B	E	M	VG	I	I	I
Growmark	599	V	VE	B	VG	S	VG	MR	MR	MR
	601	V	E	B	VG	M	VG	MR	MR	MR
	603	V	E	B	E	S	E	MR	MR	MS
	604	V	E	S	E	M	VG	S	MR	MR
	615	V	M	B	E	M	VG	S	MS	MR
	624	V	M	S	VG	M	E	MR	MS	MS
	WX19A	V	M	B	VG	M	VG	MR	MR	MR
	WX19B	V	M	B	VG	MS	E	S	MS	MR
Hoffman Seed House	H7W16	V	E	S	VG	MS	E	VG	VG	VG
	H7W15	V	E	B	VG	MS	E	VG	VG	VG
	H7W28	V	ME	B	E	MT	VG	VG	VG	VG
	H7W19	V	M	B	VG	MT	VG	VG	VG	VG
	LCS AMMO	V	ME	B	E	MS	E	VG	VG	VG

Table 9, continued

<u>Origin</u>	<u>Variety</u>	<u>Type</u>	<u>Maturity</u>	<u>Head type</u>	<u>Winter-hardiness</u>	<u>Plant height</u>	<u>Standability</u>	<u>Hessian fly</u>	<u>Leaf rust</u>	<u>Septoria</u>
Kitchen Seed	KSC 416W	V	ME	S	VG	M	VG	R	E	VG
	KSC 417W	V	M	B	VG	M	VG	R	E	E
	KSC 418W	V	M	S	VG	M	VG	R	R	R
Kratz Farms LLC	KF 553	V	ML	S	E	T	VG	I	R	R
	KF 667	V	ME	T	VG	M	E	I	R	R
	KF 727	V	M	S	VG	T	VG	I	MR	MR
	KF 15241	V	ME	S	VG	T	VG	I	MR	MR
	KF 15334	V	ML	S	E	T	VG	I	R	R
	KF 15639	V	ML	B	E	T	VG	I	MR	MR
KWS Cereals	KWS19X03	V	M	S		S-M	E		R	I
	KWS19X07	V	M	B		M	E		MR	I
	KWS19X09	V	M	B		M	E		I	MR
Lewis Hybrids	828	V	ME	S	VG	M	VG	S	MR	I
	829	V	ME	S	VG	T	VG	S	MS	MR
	833	V	M	S	G	M	G	S	R	I
	839	V	M	S	VG	M	VG	S	MR	MR
	851	V	M	S	VG	T	VG	S	R	MR
Limagrain Cereal Seeds	L11713	V	ME	B	VG	S	E	I	R	R
	L11548	V	M	B	E	M	VG	I	MR	MR
	L11719	V	ML	B	E	S	E	I	MR	MR
Monier Seed & Service	MW857	V	ML	B	VG	M	VG	NA	MR	I
Pioneer	25R25	V	L	B	E	M	VG	S	I	MR
	25R40	V	ML	B	G	S	E	S	I	MR
	25R61	V	M	B	VG	M	E	S	MR	I
	25R74	V	E	B	VG	S	VG	R	I	I
	25R77	V	E	B	VG	S	E	R	MS	MS
ProHarvest Seeds	286	V	E	S	VG	M	E	I	E	E
	317	V	E	S	E	M	E	I	G	VG
Pro Seed Genetics	PRO 410	V	M	T		M	E		R	I
Go Wheat	2058	V	M	B	G	S	VG	S	I	MR
	EXP18-1	V	M	S	G	M	VG	R	MR	MR
	EXP18-2	V	E	B	G	M	G		MR	MR
UniSouth Genetics	3404	V	ML	B	VG	M	E	S	R	R
	3329	V	ME	B	E	M	VG	S	I	MR
	3536	V	ME	B	VG	MT	VG	R	MR	MR

Codes:

Type: V = variety; B = blend; H = hybrid
Maturity: E = 2 or

Head type: S = smooth (not bearded); T = tip-awned; B = awned (bearded)
Winterhardiness and standability are rated fair (F), good (G), very good (VG) or excellent (E)
Plant height: S = short; M = medium; T = tall
Hessian fly and disease reactions: S = susceptible; R = resistant; I = intermediate;
MS = moderately susceptible; MR = Moderately resistant

2019 University of Illinois
Winter Wheat Variety Trial
Fusarium Head Blight evaluation *
Jessica Rutkoski, Frederic L. Kolb and Olivia C. Jones

Varieties with greater resistance have a lower FHB rating.

Company	Entry Name	FHB Rating (0-9)	Company	Entry Name	FHB Rating (0-9)
AgriMAXX	AgriMAXX 413	6.9	Hoffman Seed	H7W16	6.6
AgriMAXX	AgriMAXX 454	4.7	Hoffman Seed	H7W15	4.5
AgriMAXX	AgriMAXX 444	5.3	Hoffman Seed	H7W28	5.5
AgriMAXX	AgriMAXX 438	5.6	Hoffman Seed	H7W19	7.7
AgriMAXX	AgriMAXX 463	3.1	LCS	AMMO	5.6
AgriMAXX	AgriMAXX 473	3.5	Kitchen Seed Company	KSC 416	5.6
AgriMAXX	AgriMAXX 475	4.3	Kitchen Seed Company	KSC 417	6.4
AgriMAXX	AgriMAXX 485	4.5	Kitchen Seed Company	KSC 418	5.8
AgriMAXX	AgriMAXX 486	5.1	Kratz Farms	KF 15241	3.8
AgriMAXX	AgriMAXXExp 1995	6.1	Kratz Farms	KF 15334	2.8
AgriMAXX	AgriMAXX 495	4.7	Kratz Farms	KF 727	7.4
AgriMAXX	AgriMAXXExp 1913	5.8	Kratz Farms	KF 15639	5.3
AgriMAXX	AgriMAXXExp 1902	5.6	Kratz Farms	KF 667	4.6
AgriMAXX	AgriMAXXExp 1906	8.3	Kratz Farms	KF 553	3.0
AgriPro	SY 547	5.7	KWS Cereals	KWS19X03	7.0
AgriPro	SY 100	5.8	KWS Cereals	KWS19X07	7.0
AgriPro	SY Viper	6.4	KWS Cereals	KWS19X08	6.8
AgriPro	SR8146	4.9	LEWIS	Lewis 828	6.2
BioTown Seeds	Diener 491W	4.4	LEWIS	LEWIS 829	6.7
BioTown Seeds	Diener 497W	4.1	LEWIS	Lewis 833	4.9
BioTown Seeds	D510W	3.8	LEWIS	Lewis 839	6.4
BioTown Seeds	Diener XW1902W	5.6	LEWIS	LEWIS 851	4.6
Croplan	SRW 9606	6.0	Limagrain	L11713	6.6
Croplan	SRW 9415	7.0	Limagrain	L11548	8.5
Croplan	SRW 8550	3.9	Limagrain	L11719	5.4
Croplan	CP8800	5.4	Monier Seed	MW857	6.4
DeRaedt Seed	DeRaedt 11	6.2	Pioneer	Pioneer 25R25	3.6
DeRaedt Seed	DeRaedt 17	5.4	Pioneer	Pioneer 25R40	5.5
DeRaedt Seed	DeRaedt 24	4.9	Pioneer	Pioneer 25R61	3.5
Dyna-Gro	Dyna-Gro 9980	4.2	Pioneer	Pioneer 25R74	4.5
Dyna-Gro	Dyna-Gro 9701	4.3	Pioneer	Pioneer 25R77	4.9
Dyna-Gro	Dyna-Gro 9750	3.2	Pioneer	Pioneer XW17L	3.9
Dyna-Gro	Dyna-Gro 9862	3.7	ProSeed Genetics	PRO 410	7.6
Dyna-Gro	Dyna-Gro 9941	5.3	ProHarvest	ProHarvest 286	4.2
Dyna-Gro	Dyna-Gro 9522	5.2	ProHarvest	ProHarvest 317	3.7
Dyna-Gro	WX19711	4.4	Go Wheat	Go Wheat 2058	5.8
Dyna-Gro	WX18416	5.9	Go Wheat	Go Wheat EXP18-1	3.3
Dyna-Gro	Dyna-Gro 9932	4.8	Go Wheat	Go Wheat EXP18-2	7.6
Dyna-Gro	WX19713	3.6	USG	USG 3404	4.1
Dyna-Gro	WX19714	3.8	USG	USG 3329	5.9
Green Valley	GV 619	4.8	USG	USG 3536	3.5
Green Valley	GV 658	3.5	Susceptable Check	Pioneer 25R47	6.6
Green Valley	GV 668	5.0	Moderate Res Check	IL07-4415	3.1
Green Valley	GV 679	4.6	Resistant check	IL02-18228	1.9
Green Valley	GV 67X	4.0	Test Average	5.0	
Green Valley	GV 68X	3.6	LSD (0.05)	1.2	
GROWMARK	FS 599	4.6	CV (%)	16.6	
GROWMARK	FS 601	5.0			
GROWMARK	FS 603	4.4			
GROWMARK	FS 604	2.8			
GROWMARK	FS 615	4.2			
GROWMARK	FS 624	7.4			
GROWMARK	WX19A	6.0			
GROWMARK	WX19B	6.7			

*The test nursery was inoculated and mist irrigated. Three replications were evaluated.

FHB ratings are standardized.

FHB rating is an index calculated from Incidence, Severity and Kernel quality.