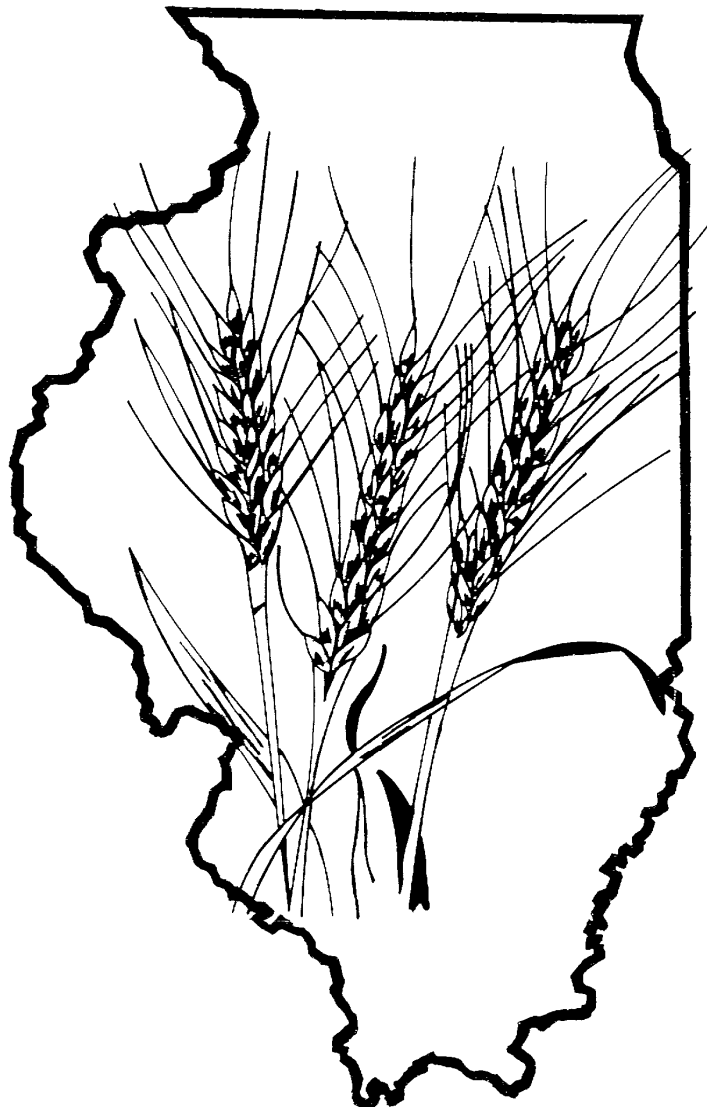


# **WHEAT PERFORMANCE IN ILLINOIS TRIALS - 2007**



**Crop Sciences Special Report 2007-01  
Department of Crop Sciences  
University of Illinois  
July 2007**

# WHEAT PERFORMANCE IN ILLINOIS TRIALS - 2007

## Crop Sciences Special Report 2007-01, July 2007

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Following record wheat yields and good doublecrop soybean yields in 2006, wheat acreage increased moderately in Illinois for 2007, with 970,000 acres planted in the fall of 2006. The fall was relatively cool and wet in many areas, and the crop got off to a rocky start.

December and January were relatively mild, and crop caught up some on growth, before very cold February weather set in. The cold caused winter injury to some varieties at the northern locations. March was much warmer than normal, and growth of the crop was excellent by early April, with height and growth stage both ahead of normal. On April 5-10, however, an unusually widespread and severe cold spell settled over Illinois, with temperatures in the upper teens to low 20s over the entire state on April 7 and 8. Leaf damage was extensive, and damage to the lower stems was common throughout Southern Illinois, where the wheat had jointed. Damage to main stalk heads also occurred, especially in fields that had been planted early. Some producers, especially south of I-64 (Mt. Vernon) destroyed the crop, as did some producers in the northern half of Illinois, especially where stands and growth had not been very good before the freeze. The variety trial at Dixon Springs, which had not emerged well, was abandoned.

After the freeze, the weather in April and May was outstanding for wheat in most areas, with below-normal rainfall and warm temperatures. The excellent weather encouraged growth of secondary tillers, which in some fields supported nearly all of the heads that formed. A substantial amount of barley yellow dwarf virus (BYDV) appeared in some fields, probably carried by aphids in March, before the freeze. Heading time ranged from later than normal in much of southern Illinois (where tillers had to grow back) to about normal in the northern part of the state. The warm weather fostered very rapid grainfill, and harvest started earlier than normal.

The freeze resulted in the greatest amount of abandonment in recent years, with harvested acreage estimated at only 810,000 (83%) of the 970,000 acres planted. Yield on acres harvested this year is estimated at 57 bushels per acre, which is the third-lowest yield of—and 2 bu less than the average of—the past 10 years. Test weights were good, and the quality of the crop was generally good, though there was some Fusarium head scab in fields in southwestern Illinois. Seed treatment insecticide (Gaucho), which provides some protection against the aphids that transmit BYDV, produced a yield increase in three or four selected varieties at most locations.

Plots in these trials were seeded at the rate of 36 seeds per square foot, and consisted of six, 7.5-inch rows trimmed to about 17 feet long before harvest. There were three replications. Yields were corrected to 13.5% moisture. The final table of the report includes Fusarium head scab ratings from Dr. Fred Kolb's misted, inoculated scab trial at Urbana. Seed companies were allowed to include entries treated with seed-applied insecticide (Gaucho or Cruiser), with the insecticide identified in the name. We treated seed of four varieties with Gaucho at each location as a test of yield response to this input.

<u>Location</u>	<u>Cooperators</u>	<u>Soil type</u>	<u>Planted</u>	<u>N fertilizer</u>	<u>Harvest</u>
Dixon Springs	Steve Ebelhar Ron Hines	Grantsburg silt loam	Oct. 12	25 Fall 95 Spring	Abandoned
Belleville	Ron Krausz	Ebbert silt loam	Oct. 12	30 Fall 80 Spring	June 20
Brownstown	Lindell Deal	Cisne silt loam	Oct. 9	30 Fall 70 Spring	June 15
Orr Center	Mike Vose	Clarksdale silt loam	Oct. 3	40 Fall 60 Spring	June 20
Urbana	Bob Dunker Mike Kleiss	Flanagan silt loam	Sept. 28	40 Fall 40 Spring	June 21
DeKalb	Lyle Paul Dave Lindgren	Drummer silty clay loam	Sept. 21	40 Fall 40 Spring	July 2

Participating companies are listed on Page 2, regional averages on Pages 3 and 4, individual site results in Pages 5-10 (data from 2006 at Dixon Springs are repeated here, since the 2007 trial was abandoned), wheat variety characteristics on Page 11, and the Fusarium head scab ratings on Page 12.

## Participating Companies

We thank these companies for their support of this program in 2007.

Adler Seeds  
6085W 550N  
Sharpsville, IN 46068  
(800)-536-2676

AgriPro COKER  
520 E 1050 S  
Brookston, IN 47923  
(765) 563-3111

Beck's Hybrids  
6767 E 276<sup>th</sup> St  
Atlanta, IN 46031  
(317) 984-3508

Brown Seed Enterprises, Inc.  
289 Co. Rd. 550 N  
Neoga, IL 62447  
(217) 895-2335

CPS-Vigoro Seeds  
PO Box 1467  
Galesburg, IL 61402-1467  
(309) 342-4100

Coops Creek Acres, Inc.  
12102 Chesterfield Rd  
Shipman, IL 62685  
(618) 836-7736

DeRaedt Seed Corp.  
10 N 971 Tower Road  
Hampshire, IL 60140  
(847) 464-5553

Excel Brand Seed  
Box 320  
Camp Point, IL 62320  
(800) 969-6717

Green Valley Seed  
P O Box 35  
Kahoka, MO 63445  
(660) 727-3341

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

Haas Seed House  
305 N. Broadway  
Albers, IL 62215  
(618) 248-5165

Hartke Seed Farms  
22679 Sunset Rd  
Litchfield, IL 62056  
(217) 324-2680

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

JGL, Inc  
3540 S. US 231  
Greencastle, IN 46135  
(765) 653-5402

Kaltenberg Seed  
P O Box 278, 5506 St Rd 19  
Waunakee, WI 53597-0278  
(608) 849-2051

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

Lewis Hybrids, Inc  
530 West Maple Ave.  
Ursa, IL 62376  
(800) 252-7851

Miles Seed  
PO Box 22879  
Owensboro, KY 42304  
(800) 685-0877

Miller Bros. Farm & Fertilizer  
2001 Niemannsville Trail  
Walshville, IL 62091  
(217) 456-9311

MWS Seeds, LLC  
2737 N 700 E Rd  
Ashkum, IL 60911  
(815) 698-2204

Pioneer Hi-Bred International  
14171 Carole Drive  
Bloomington, IL 61704  
(309) 821-9940

UAP Distribution  
1267 W. Washington  
Pittsfield, IL 62363  
(800) 533-8309

Wilken Seed Grains, Inc.  
P O Box 770, 1487 N 1800 E Rd  
Pontiac, IL 61764  
(815) 844-3458

**Table 1. Southern Illinois regional wheat variety trial results, 2007**

<u>Company</u>	<u>Variety</u>	<u>Regional Average</u>			<u>Belleville</u>	<u>Brownstown</u>
		<u>Yield</u> bu/ac	<u>Yield Rank</u> 1 to 64	<u>Test wt</u> lb/bu	<u>Yield</u> in.	<u>Yield</u> bu/ac
Adler Seed	Adler 565	77.0	19	58.7	70.2	83.7
Adler Seed	Adler 575	66.3	48	57.9	58.5	74.1
AgriPro COKER	Branson	70.7	38	58.9	68.0	73.5
AgriPro COKER	COKER 9312	59.1	62	60.7	60.2	58.0
AgriPro COKER	COKER 9511	67.1	46	62.7	63.3	71.0
AgriPro COKER	COKER 9553	60.6	60	60.1	57.7	63.5
AgriPro COKER	Cooper	69.8	42	58.8	66.5	73.0
AgriPro COKER	W1377	78.3	14	62.0	74.3	82.2
Beck's Hybrids	BECK 117	70.4	39	60.3	64.2	76.6
Beck's Hybrids	BECK 122	77.5	16	58.5	66.6	88.4
Brown Seed Enterprises	766	70.1	40	60.3	62.7	77.5
Brown Seed Enterprises	ARISE 817	74.2	29	60.4	67.1	81.3
Brown Seed Enterprises	ARISE 857	76.7	20	57.2	65.7	87.7
Brown Seed Enterprises	ARISE 887	75.2	23	58.6	70.7	79.7
Brown Seed Enterprises	ARISE X-21	72.8	32	60.7	64.6	81.0
Coops Creek Acres	EXCEL 410 TW	78.3	12	60.1	72.2	84.5
Coops Creek Acres	EXCEL 410 TW Cruiser	86.5	2	60.6	80.1	92.9
CPS-Vigoro Seeds	Vigoro 9611	67.3	45	58.1	59.0	75.6
CPS-Vigoro Seeds	Vigoro 9710	66.2	49	59.3	56.5	76.0
CPS-Vigoro Seeds	Vigoro 9712	65.7	51	60.1	61.6	69.7
CPS-Vigoro Seeds	Vigoro 9723	74.9	25	58.8	68.6	81.2
Excel Brand Seed	EXCEL 442	80.8	7	59.9	78.3	83.4
GROWMARK	FS 618	65.8	50	59.7	54.9	76.7
GROWMARK	FS 628	75.6	21	59.0	66.2	85.0
GROWMARK	FS 634	71.7	33	60.1	64.1	79.4
GROWMARK	FS 637	62.8	58	58.5	51.4	74.2
GROWMARK	FS 645	64.3	54	59.5	54.0	74.7
Haas Seed House	EXCEL 343	77.1	17	59.4	74.3	79.8
Haas Seed House	EXCEL 343 Cruiser	87.5	1	59.9	80.5	94.5
Hartke Seed Farms	EXCEL 307	73.7	31	60.1	66.2	81.3
Hoffman Seed House	EXCEL 173	70.7	37	60.2	63.9	77.5
Hoffman Seed House	EXCEL 173 Cruiser	81.8	4	60.2	71.4	92.2
JGL	Exp 701	74.5	27	56.5	64.2	84.9
Kitchen Seed Company	KSC 406W	71.4	34	60.2	61.9	80.9
Kitchen Seed Company	KSC 407W	63.8	55	59.6	53.0	74.6
Lewis Hybrids	LEWIS 830	78.5	11	59.2	68.8	88.2
Lewis Hybrids	LEWIS 841	64.9	53	58.1	55.4	74.3
Miles Seed	EXSEGEN Judith	70.8	36	57.5	60.6	81.1
Miles Seed	EXSEGEN Rachel	52.7	64	55.7	51.7	53.6
Miles Seed	EXSGEN Dinah	71.1	35	61.0	65.2	77.1
Miles Seed	EXSGEN Leah	62.6	59	58.6	62.2	63.0
Miles Seed	EXSGEN Lydia	62.8	57	59.6	60.8	64.9
Miller Bros. Farm & Fertilizer	EXCEL 392 TW	74.0	30	59.2	75.1	72.9
Miller Bros. Farm & Fertilizer	EXCEL 392 TW Cruiser	80.2	9	59.0	76.9	83.5
MWS Seeds	MWS 132	77.5	15	60.4	73.5	81.6
MWS Seeds	MWS 135	80.0	10	58.6	72.4	87.7
Pioneer Hi-Bred Int'l	Pioneer 25R47	83.4	3	57.3	78.1	88.6
Pioneer Hi-Bred Int'l	Pioneer 25R54	74.8	26	59.7	72.2	77.4
Pioneer Hi-Bred Int'l	Pioneer 25R56	80.8	6	58.3	74.1	87.6
Pioneer Hi-Bred Int'l	Pioneer 25R63	78.3	13	60.1	78.2	78.4
Pioneer Hi-Bred Int'l	Pioneer 25R78	80.7	8	61.1	72.6	88.7
Public	Bess	68.6	44	60.9	63.4	73.8
Public	Ernie	63.1	56	59.3	55.9	70.2
Public	Kaskaskia	80.8	5	62.1	75.9	85.8
Public	Madison	59.6	61	57.9	57.1	62.1
Public	McCormick	65.1	52	61.4	60.3	69.9
Public	Patterson	67.1	47	60.5	60.6	73.5
Public	Roane	75.1	24	61.8	72.0	78.2
Public	Sisson	56.3	63	57.5	52.8	59.9
Public	Truman	75.5	22	57.9	77.7	73.3
UAP Distribution	Dyna-Gro 410	74.5	28	59.1	65.8	83.1
UAP Distribution	Dyna-Gro 415	69.3	43	59.4	61.6	77.1
UAP Distribution	Dyna-Gro 421	69.8	41	60.5	63.8	75.9
UAP Distribution	Dyna-Gro 444	77.1	18	59.9	72.5	81.6
	Trial Mean	72.3		59.6	66.3	78.3
	LSD, 10%	8.0		1.7	4.0	5.6
	CV, %	11.4		2.4	5.8	6.8

Averaged over three varieties in the Southern Region, Gaucho seed treated increased yield by 3.2 bushels/acre.

**Table 2. Northern Illinois regional wheat variety trial results, 2007**

<u>Company</u>	<u>Entry</u>	<u>Regional average</u>			<u>Perry</u>	<u>Urbana</u>	<u>DeKalb</u>
		<u>Yield</u> bu/ac	<u>Yield Rank</u> 1 to 56	<u>Test wt</u> lb/bu	<u>Yield</u> bu/ac	<u>Yield</u> bu/ac	<u>Yield</u> bu/ac
AgriPro COKER	Branson	74.1	18	59.1	81.9	68.9	71.4
AgriPro COKER	COKER 9511	63.3	42	63.1	70.3	62.7	56.9
AgriPro COKER	Cooper	71.5	28	59.2	74.0	68.9	71.6
AgriPro COKER	W1377	85.9	1	63.0	95.1	80.3	82.1
CPS-Vigoro Seeds	Vigoro 9611	71.9	25	59.3	72.0	68.8	74.9
CPS-Vigoro Seeds	Vigoro 9712	63.7	38	59.5	71.9	55.5	63.8
CPS-Vigoro Seeds	Vigoro 9723	74.4	17	59.4	78.5	70.6	74.0
DeRaedt Seed	DeRaedt 88	70.1	31	60.9	78.7	66.2	65.4
DeRaedt Seed	DeRaedt 98	62.8	45	58.6	71.6	59.7	57.0
Excel Brand Seed	EXCEL 307	62.8	44	60.3	68.0	58.7	61.7
Excel Brand Seed	EXCEL 341	73.5	21	60.9	80.9	70.5	69.2
Excel Brand Seed	EXCEL 343	71.8	26	60.8	76.6	65.6	73.2
Excel Brand Seed	EXCEL 399	71.7	27	60.4	76.9	68.6	69.5
Excel Brand Seed	EXCEL 423	78.2	8	61.6	86.2	73.3	75.0
Green Valley Seed	Willcross 733	63.5	39	60.5	70.2	59.0	61.2
Green Valley Seed	Willcross 736	78.8	6	59.3	76.0	79.6	80.9
GROWMARK	FS 628	75.7	14	58.8	83.7	64.0	79.6
GROWMARK	FS 634	62.9	43	60.3	69.8	57.7	61.3
GROWMARK	FS 637	74.1	19	59.4	76.7	70.4	75.2
GROWMARK	FS 645	70.6	30	62.1	67.1	64.8	79.8
GROWMARK	FS 8309	63.4	40	59.7	67.5	63.3	59.5
JGL	Exp 701	78.5	7	57.9	84.8	72.0	78.7
JGL	Exp 702	80.2	4	59.1	82.8	79.1	78.6
JGL	Exp 703	64.2	37	58.1	76.9	60.9	54.6
Kaltenberg Seeds	KW53	77.7	9	59.5	78.2	73.4	81.6
Kaltenberg Seeds	KW62	75.9	12	59.7	80.4	69.8	77.4
Kaltenberg Seeds	KW63	75.9	13	60.0	79.7	71.4	76.5
Kitchen Seed Company	KSC 406W	61.6	47	59.9	70.3	56.8	57.7
Kitchen Seed Company	KSC 407W	56.6	50	60.0	65.3	48.6	55.9
Lewis Hybrids	LEWIS 830	77.0	10	59.5	81.5	71.7	77.9
Lewis Hybrids	LEWIS 841	72.1	23	59.7	74.5	68.2	73.7
MWS Seeds	EXCEL 173*	50.8	55	58.5	69.7	35.0	47.6
MWS Seeds	MWS 128	74.7	16	59.4	77.9	69.5	76.7
MWS Seeds	MWS 135	81.4	3	59.5	85.4	77.6	81.1
Pioneer Hi-Bred Int'l	Pioneer 25R47	76.5	11	57.9	80.2	72.0	77.2
Pioneer Hi-Bred Int'l	Pioneer 25R54	69.6	32	59.6	74.6	70.8	63.3
Pioneer Hi-Bred Int'l	Pioneer 25R56	84.8	2	60.0	87.3	80.4	86.7
Pioneer Hi-Bred Int'l	Pioneer 25R63	71.3	29	59.2	82.9	66.5	64.5
Public	Bess*	55.0	52	60.7	66.1	42.8	56.2
Public	Ernie*	47.8	56	59.6	54.8	40.0	48.5
Public	Kaskaskia	80.0	5	62.7	84.2	73.4	82.3
Public	Madison*	51.5	54	58.6	59.4	43.5	51.6
Public	McCormick	52.4	53	60.8	58.6	54.0	44.6
Public	Patterson	62.3	46	60.2	66.0	58.6	62.1
Public	Roane	75.2	15	62.9	76.1	73.8	75.9
Public	Sisson*	55.1	51	58.6	58.8	48.9	57.4
Public	Truman	60.1	48	59.4	72.9	55.2	52.2
UAP Distribution	Dyna-Gro 415	64.4	36	60.4	69.5	60.1	63.6
UAP Distribution	Dyna-Gro 421	66.2	34	59.4	70.7	53.5	74.3
Wilken Seed Grains	Wilken W 102	58.6	49	60.1	70.9	51.5	53.4
Wilken Seed Grains	Wilken W 106	65.1	35	60.5	70.9	59.0	65.3
Wilken Seed Grains	Wilken W 110	73.1	22	61.3	77.3	70.6	71.3
Wilken Seed Grains	Wilken W 124	74.0	20	62.0	77.0	74.1	70.8
Wilken Seed Grains	Wilken W 130	67.2	33	60.1	75.3	52.3	74.1
Wilken Seed Grains	Wilken W 135	72.0	24	61.3	79.3	66.4	70.4
Wilken Seed Grains	Wilken W 204	63.3	41	60.0	65.3	63.3	61.2
	Trial Mean	69.8		60.2	75.3	65.0	69.0
	LSD, 10%	6.4		1.1	4.5	4.3	4.7
	CV, %	11.8		2.3	5.6	6.3	6.4

Averaged over four varieties in the Northern Region, Gaucho seed treated increased yield by 3.9 bushels/acre.

**Table 3. Results of the 2006 wheat variety trial at Dixon Springs, in far southeastern Illinois.**

**THE 2007 TRIAL WAS ABANDONED, SO THIS IS A RERUN OF THE 2006 DATA.**

Company	Variety	Yield		Test wt.	Height	2-yr avg	3-yr avg
		Yield	rank			2005-06	2004-06
		bu/ac	1 to 70	lb/bu	in.	bu/ac	bu/ac
Adler Seeds	545	62.1	39	58.1	35.3		
Adler Seeds	575	74.2	7	58.1	34.0		
Adler Seeds	625	65.3	31	56.8	36.7		
AgriPro COKER	9312	69.3	18	59.3	31.3	79.3	72.1
AgriPro COKER	9436	55.2	62	56.2	32.3	68.3	69.5
AgriPro COKER	9511	60.2	46	59.5	35.3		
AgriPro COKER	9553	64.2	33	60.6	34.7		
AgriPro COKER	Benton	58.9	54	57.0	32.7	70.7	67.2
AgriPro COKER	Branson	74.9	5	58.0	33.3	80.3	
AgriPro COKER	Cooper	72.6	9	58.4	33.3	77.7	76.9
Brown Seed Enterprises	766	66.8	25	59.3	31.3	74.3	74.0
Brown Seed Enterprises	777	53.6	67	58.4	32.0		
Brown Seed Enterprises	X21	74.3	6	58.5	33.0	77.6	75.8
Brown Seed Enterprises	X27	71.3	12	58.6	36.3	78.9	76.7
Excel Brand Seeds	173	70.9	17	58.6	36.0		
Excel Brand Seeds	176	47.7	71	56.9	37.0		
Excel Brand Seeds	211	55.9	59	57.1	35.0	70.7	70.4
Excel Brand Seeds	211 Cruiser	50.4	70	57.5	34.7		
Excel Brand Seeds	307	68.2	20	59.3	38.3	73.1	73.9
Excel Brand Seeds	361	59.4	51	57.9	37.7		
Excel Brand Seeds	392 TW	66.6	26	57.7	38.3	74.8	77.9
Excel Brand Seeds	392 TW Cruiser	75.4	4	57.9	40.0		
Excel Brand Seeds	399	62.8	37	58.0	35.3	74.1	
Excel Brand Seeds	400-1	66.5	27	59.3	36.3	76.0	77.5
Excel Brand Seeds	410 TW	67.7	22	59.2	36.3	79.2	
GROWMARK	FS 634	53.7	66	57.4	37.0	70.1	69.0
GROWMARK	FS 637	72.9	8	57.9	34.3		
GROWMARK	FS 645	71.0	16	60.0	34.3		
GROWMARK	FS 8302	61.7	41	58.0	32.7	73.9	76.1
GROWMARK	FS 8309	56.1	58	57.1	33.7	66.3	66.4
JGL	Exp 603	60.2	48	58.3	35.7		
JGL	Exp 604	60.3	45	55.9	35.3		
Lewis Hybrids	823	63.1	35	58.2	36.0		
Lewis Hybrids	841	72.3	10	59.2	33.7		
Lewis Hybrids	860	61.1	43	57.0	36.0		
Merschman Seeds	Barbie VII	64.7	32	58.1	35.3	75.9	75.0
Merschman Seeds	Bintee VII	57.1	56	57.0	35.0	66.6	
Merschman Seeds	Genie IX	59.6	50	56.8	36.0	73.7	73.6
Merschman Seeds	Katie X	55.6	60	57.7	35.7	65.1	
Miles Seed	Judith	55.2	63	56.6	35.7	72.8	71.9
Miles Seed	Leah	61.0	44	58.7	31.3	73.6	
Miles Seed	Lydia	71.2	13	58.2	32.0		
Miles Seed	Rachel	55.3	61	57.5	33.3	70.3	
Ohio Seed Improvement	Bravo	63.0	36	59.9	35.0	70.4	67.0
Pioneer Hi-Bred International	25R47	77.7	1	57.5	31.3	85.5	83.7
Pioneer Hi-Bred International	25R54	71.1	14	57.8	35.7	78.8	
Pioneer Hi-Bred International	25R63	76.7	2	59.3	35.3		
Pioneer Hi-Bred International	25R78	66.9	24	58.8	33.0	74.3	73.0
Public	Cardinal	54.0	65	55.0	37.0	63.5	62.6
Public	Ernie	65.8	30	57.8	32.0	69.1	61.0
Public	Kaskaskia	67.4	23	60.4	39.3	78.5	74.5
Public	Madison	53.1	68	56.4	33.7	68.7	62.0
Public	McCormick	59.2	53	60.8	31.7	69.0	69.9
Public	Patterson	50.5	69	58.6	34.3	60.7	58.0
Public	Roane	66.4	28	60.2	32.7	75.2	75.1
Public	Sisson	68.0	21	57.3	30.0	74.9	65.0
Public	Truman	54.0	64	54.8	38.0	64.3	67.5
Royster-Clark	V9410	59.4	52	58.9	35.3	67.8	68.5
Royster-Clark	V9412	71.0	15	58.7	31.7	73.5	72.5
Royster-Clark	V9512	59.9	49	58.7	35.7	66.2	
Royster-Clark	WX 8501	68.6	19	57.1	34.3		
Steyer Seed	McLane	66.0	29	57.8	40.0	75.6	
Steyer Seed	Merrell	75.4	3	58.2	34.7	83.6	
Steyer Seed	Morral	61.9	40	58.0	35.0		
Steyer Seed	Wiser	63.2	34	58.2	36.3		
UAP	DG 401	61.6	42	57.9	36.3	71.0	69.1
UAP	DG 410	60.2	47	57.5	36.7	71.2	
UAP	DG 415	62.6	38	58.5	37.7	72.0	72.8
UAP	DG 421	71.4	11	58.2	30.7		
UAP	DG 427	58.0	55	57.9	37.3		
Wilken Seed Grains	W-102	56.2	57	57.0	35.7	69.7	69.9
	Trial Mean	64.3		58.1	35.0		
	LSD, 10%	7.7		1.2	1.8		
	CV, %	11.5		1.9	4.8		

Averaged over four varieties in this location, Gaucho seed treated increased yield by 10.1 bushels/acre.

**Table 4. Results of the 2007 wheat variety trial at Belleville, in southwestern Illinois.**

Company	Variety	Yield bu/ac	Yield Rank 1 to 64	Test wt. lb/bu	Height in.	2-yr avg	3-yr avg
						2006-07 bu/ac	2005-07 bu/ac
Adler Seed	Adler 565	70.2	22	57.2	32.0		
Adler Seed	Adler 575	58.5	53	55.9	29.3	62.8	
AgriPro COKER	Branson	68.0	25	58.2	29.7	66.2	75.0
AgriPro COKER	COKER 9312	60.2	51	59.5	26.3	63.8	68.8
AgriPro COKER	COKER 9511	63.3	41	62.1	30.3	63.4	
AgriPro COKER	COKER 9553	57.7	54	59.7	29.0	61.0	
AgriPro COKER	Cooper	66.5	28	56.9	27.7	67.2	76.7
AgriPro COKER	W1377	74.3	11	61.4	33.0		
Beck's Hybrids	BECK 117	64.2	36	59.6	28.7		
Beck's Hybrids	BECK 122	66.6	27	56.8	31.7		
Brown Seed Enterprises	766	62.7	42	58.9	29.0	62.9	71.5
Brown Seed Enterprises	ARISE 817	67.1	26	59.5	28.3		
Brown Seed Enterprises	ARISE 857	65.7	32	54.7	30.0		
Brown Seed Enterprises	ARISE 887	70.7	21	57.3	32.3		
Brown Seed Enterprises	ARISE X-21	64.6	34	59.7	29.3	66.3	75.5
Coops Creek Acres	EXCEL 410 TW	72.2	18	59.7	34.0	65.5	72.3
Coops Creek Acres	EXCEL 410 TW Cruiser	80.1	2	60.7	34.0		
CPS-Vigoro Seeds	Vigoro 9611	59.0	52	56.3	28.3	63.7	
CPS-Vigoro Seeds	Vigoro 9710	56.5	56	57.5	27.7		
CPS-Vigoro Seeds	Vigoro 9712	61.6	45	59.5	27.7		
CPS-Vigoro Seeds	Vigoro 9723	68.6	24	57.5	32.3		
Excel Brand Seed	EXCEL 442	78.3	3	59.3	36.3		
GROWMARK	FS 618	54.9	59	58.7	33.3		
GROWMARK	FS 628	66.2	29	57.1	32.7		
GROWMARK	FS 634	64.1	37	59.2	32.3	60.4	70.8
GROWMARK	FS 637	51.4	64	56.8	30.3	59.4	
GROWMARK	FS 645	54.0	60	58.3	29.3	61.6	
Haas Seed House	EXCEL 343	74.3	10	58.2	33.0		
Haas Seed House	EXCEL 343 Cruiser	80.5	1	58.9	34.0		
Hartke Seed Farms	EXCEL 307	66.2	30	59.5	32.3	64.0	74.1
Hoffman Seed House	EXCEL 173	63.9	38	59.1	30.7	67.1	
Hoffman Seed House	EXCEL 173 Cruiser	71.4	20	58.9	34.0		
JGL	Exp 701	64.2	35	54.1	31.7		
Kitchen Seed Company	KSC 406W	61.9	44	59.7	34.7		
Kitchen Seed Company	KSC 407W	53.0	61	58.4	32.3		
Lewis Hybrids	LEWIS 830	68.8	23	57.7	33.3		
Lewis Hybrids	LEWIS 841	55.4	58	56.1	28.7	60.4	
Miles Seed	EXSEGEN Judith	60.6	49	55.5	29.3	58.2	64.6
Miles Seed	EXSEGEN Rachel	51.7	63	56.9	26.7	57.8	66.9
Miles Seed	EXSGEN Dinah	65.2	33	59.8	29.3		
Miles Seed	EXSGEN Leah	62.2	43	57.2	28.0	64.8	72.0
Miles Seed	EXSGEN Lydia	60.8	47	59.3	29.0	65.8	
Miller Bros. Farm & Fertilizer	EXCEL 392 TW	75.1	9	59.0	35.0	71.5	79.6
Miller Bros. Farm & Fertilizer	EXCEL 392 TW Cruiser	76.9	7	59.1	33.3	75.4	
MWS Seeds	MWS 132	73.5	13	60.0	34.3		
MWS Seeds	MWS 135	72.4	16	57.3	32.7		
Pioneer Hi-Bred Int'l	Pioneer 25R47	78.1	5	56.5	28.3	73.3	80.7
Pioneer Hi-Bred Int'l	Pioneer 25R54	72.2	17	58.8	32.7	76.8	83.0
Pioneer Hi-Bred Int'l	Pioneer 25R56	74.1	12	57.7	30.3		
Pioneer Hi-Bred Int'l	Pioneer 25R63	78.2	4	59.7	32.7	73.3	
Pioneer Hi-Bred Int'l	Pioneer 25R78	72.6	14	60.0	30.3	72.7	79.7
Public	Bess	63.4	40	59.9	32.0		
Public	Ernie	55.9	57	59.0	28.0	50.6	60.9
Public	Kaskaskia	75.9	8	61.6	35.3	69.2	73.4
Public	Madison	57.1	55	56.6	32.0	54.8	65.9
Public	McCormick	60.3	50	60.6	29.3	59.2	66.7
Public	Patterson	60.6	48	59.6	30.3	54.9	64.0
Public	Roane	72.0	19	61.6	27.0	71.1	74.5
Public	Sisson	52.8	62	56.2	26.7	57.0	70.9
Public	Truman	77.7	6	59.0	35.7	64.7	73.3
UAP Distribution	Dyna-Gro 410	65.8	31	58.7	33.0	62.1	72.8
UAP Distribution	Dyna-Gro 415	61.6	46	58.2	33.7	58.4	68.1
UAP Distribution	Dyna-Gro 421	63.8	39	59.6	27.7	65.4	
UAP Distribution	Dyna-Gro 444	72.5	15	59.5	34.0		
	Trial Mean	66.3		58.6	31.1		
	LSD, 10%	4.0		0.8	1.8		
	CV, %	5.8		1.2	5.6		

Averaged over three varieties in this location, Gaucho seed treated increased yield by 3.6 bushels/acre

**Table 5. Results of the 2007 wheat variety trial at Brownstown, in south central Illinois.**

Company	Variety	Yield		Test wt.	Height	2-yr avg	3-yr avg
		bu/ac	Rank 1 to 64			2006-07 bu/ac	2005-07 bu/ac
Adler Seed	Adler 565	83.7	15	60.3	40.0		
Adler Seed	Adler 575	74.1	47	59.8	34.3	67.4	
AgriPro COKER	Branson	73.5	50	59.7	33.7	70.0	73.3
AgriPro COKER	COKER 9312	58.0	63	61.9	30.3	65.8	64.5
AgriPro COKER	COKER 9511	71.0	54	63.4	35.7	70.6	
AgriPro COKER	COKER 9553	63.5	59	60.6	33.0	64.1	
AgriPro COKER	Cooper	73.0	52	60.7	33.7	68.9	70.5
AgriPro COKER	W1377	82.2	19	62.5	36.3		
Beck's Hybrids	BECK 117	76.6	39	61.0	34.3		
Beck's Hybrids	BECK 122	88.4	6	60.3	38.7		
Brown Seed Enterprises	766	77.5	34	61.8	32.0	78.4	74.8
Brown Seed Enterprises	ARISE 817	81.3	22	61.2	32.0		
Brown Seed Enterprises	ARISE 857	87.7	9	59.7	36.7		
Brown Seed Enterprises	ARISE 887	79.7	29	60.0	35.3		
Brown Seed Enterprises	ARISE X-21	81.0	26	61.7	34.3	68.5	75.7
Coops Creek Acres	EXCEL 410 TW	84.5	14	60.5	37.3	68.5	67.5
Coops Creek Acres	EXCEL 410 TW Cruiser	92.9	2	60.6	36.7		
CPS-Vigoro Seeds	Vigoro 9611	75.6	42	60.0	33.0	70.6	
CPS-Vigoro Seeds	Vigoro 9710	76.0	40	61.1	31.3		
CPS-Vigoro Seeds	Vigoro 9712	69.7	57	60.7	32.7		
CPS-Vigoro Seeds	Vigoro 9723	81.2	24	60.1	37.7		
Excel Brand Seed	EXCEL 442	83.4	17	60.4	41.0		
GROWMARK	FS 618	76.7	38	60.7	37.0		
GROWMARK	FS 628	85.0	12	60.9	38.7		
GROWMARK	FS 634	79.4	30	60.9	38.0	69.8	70.3
GROWMARK	FS 637	74.2	46	60.3	36.0	69.3	
GROWMARK	FS 645	74.7	43	60.8	35.7	72.6	
Haas Seed House	EXCEL 343	79.8	28	60.6	38.0		
Haas Seed House	EXCEL 343 Cruiser	94.5	1	60.9	37.7		
Hartke Seed Farms	EXCEL 307	81.3	23	60.7	37.0	70.2	70.5
Hoffman Seed House	EXCEL 173	77.5	33	61.3	35.3	78.6	
Hoffman Seed House	EXCEL 173 Cruiser	92.2	3	61.5	36.7		
JGL	Exp 701	84.9	13	59.0	35.7		
Kitchen Seed Company	KSC 406W	80.9	27	60.8	38.3		
Kitchen Seed Company	KSC 407W	74.6	44	60.8	39.3		
Lewis Hybrids	LEWIS 830	88.2	7	60.7	38.0		
Lewis Hybrids	LEWIS 841	74.3	45	60.2	36.3	70.7	
Miles Seed	EXSEGEN Judith	81.1	25	59.5	37.3	69.3	68.4
Miles Seed	EXSEGEN Rachel	53.6	64	54.5	32.7	63.7	64.2
Miles Seed	EXSGEN Dinah	77.1	36	62.3	34.3		
Miles Seed	EXSGEN Leah	63.0	60	60.1	34.7	58.2	62.2
Miles Seed	EXSGEN Lydia	64.9	58	60.0	34.3	68.2	
Miller Bros. Farm & Fertilizer	EXCEL 392 TW	72.9	53	59.3	38.0	67.0	67.9
Miller Bros. Farm & Fertilizer	EXCEL 392 TW Cruiser	83.5	16	59.0	38.3	77.0	
MWS Seeds	MWS 132	81.6	21	60.9	38.3		
MWS Seeds	MWS 135	87.7	8	59.9	37.3		
Pioneer Hi-Bred Int'l	Pioneer 25R47	88.6	5	58.0	34.3	79.7	79.7
Pioneer Hi-Bred Int'l	Pioneer 25R54	77.4	35	60.6	34.0	82.7	79.3
Pioneer Hi-Bred Int'l	Pioneer 25R56	87.6	10	58.8	34.7		
Pioneer Hi-Bred Int'l	Pioneer 25R63	78.4	31	60.5	35.0	73.4	
Pioneer Hi-Bred Int'l	Pioneer 25R78	88.7	4	62.2	33.3	85.0	84.2
Public	Bess	73.8	48	62.0	36.3		
Public	Ernie	70.2	55	59.5	29.7	65.6	67.4
Public	Kaskaskia	85.8	11	62.6	40.7	69.2	68.7
Public	Madison	62.1	61	59.2	35.3	63.1	65.1
Public	McCormick	69.9	56	62.3	32.3	65.8	67.2
Public	Patterson	73.5	49	61.5	37.3	59.7	59.1
Public	Roane	78.2	32	61.9	33.0	65.9	65.9
Public	Sisson	59.9	62	58.8	31.3	67.9	74.9
Public	Truman	73.3	51	56.7	38.0	65.7	71.8
UAP Distribution	Dyna-Gro 410	83.1	18	59.5	38.3	74.7	72.6
UAP Distribution	Dyna-Gro 415	77.1	37	60.7	38.7	69.2	70.4
UAP Distribution	Dyna-Gro 421	75.9	41	61.5	34.3	68.5	
UAP Distribution	Dyna-Gro 444	81.6	20	60.3	39.0		
	Trial Mean	78.3		60.6	35.9		
	LSD, 10%	5.6		0.8	2.0		
	CV, %	6.8		1.2	5.2		

Averaged over three varieties in this location, Gauchó seed treated increased yield by 2.7 bushels/acre.

Trial Mean	64.3	58.1	35.0
LSD, 10%	7.7	1.2	1.8
CV, %	11.5	1.9	4.8



**Table 6. Results of the 2007 wheat variety trial at Perry, in western Illinois.**

<u>Company</u>	<u>Variety</u>	<u>Yield</u> bu/ac	<u>Yield</u> <u>Rank</u> 1 to 56	<u>Test wt.</u> lb/bu	<u>Height</u> in.	<u>2-yr avg</u>	<u>3-yr avg</u>
						<u>2006-07</u> bu/ac	<u>2005-07</u> bu/ac
AgriPro COKER	Branson	81.9	10	58.6	33.3	80.1	
AgriPro COKER	COKER 9511	70.3	40	62.5	33.7	75.6	
AgriPro COKER	Cooper	74.0	32	57.7	33.3	77.6	72.9
AgriPro COKER	W1377	95.1	1	62.8	38.0		
CPS-Vigoro Seeds	Vigoro 9611	72.0	34	59.5	33.3	76.7	
CPS-Vigoro Seeds	Vigoro 9712	71.9	35	59.7	32.7		
CPS-Vigoro Seeds	Vigoro 9723	78.5	18	58.5	37.3		
DeRaedt Seed	DeRaedt 88	78.7	17	60.6	37.3	76.1	71.8
DeRaedt Seed	DeRaedt 98	71.6	36	58.6	37.3	67.5	
Excel Brand Seed	EXCEL 307	68.0	46	59.8	37.0	70.7	68.4
Excel Brand Seed	EXCEL 341	80.9	12	60.6	37.7		
Excel Brand Seed	EXCEL 343	76.6	26	60.0	35.0		
Excel Brand Seed	EXCEL 399	76.9	24	59.7	36.7	76.2	70.0
Excel Brand Seed	EXCEL 423	86.2	3	61.4	39.0		
Green Valley Seed	Willcross 733	70.2	42	59.8	36.7	74.9	69.3
Green Valley Seed	Willcross 736	76.0	28	58.7	35.3		
GROWMARK	FS 628	83.7	7	58.4	36.0		
GROWMARK	FS 634	69.8	43	58.5	37.3	74.1	69.5
GROWMARK	FS 637	76.7	25	58.8	36.0	80.3	
GROWMARK	FS 645	67.1	48	59.7	35.7	72.8	
GROWMARK	FS 8309	67.5	47	60.1	35.0	73.8	72.5
JGL	Exp 701	84.8	5	56.8	35.7		
JGL	Exp 702	82.8	9	58.5	35.0		
JGL	Exp 703	76.9	23	57.7	35.3		
Kaltenberg Seeds	KW53	78.2	19	58.9	35.3		
Kaltenberg Seeds	KW62	80.4	13	59.4	36.0		
Kaltenberg Seeds	KW63	79.7	15	59.6	34.0		
Kitchen Seed Company	KSC 406W	70.3	41	59.2	39.3		
Kitchen Seed Company	KSC 407W	65.3	52	59.2	37.0		
Lewis Hybrids	LEWIS 830	81.5	11	59.0	37.0		
Lewis Hybrids	LEWIS 841	74.5	31	59.0	33.0	81.0	
MWS Seeds	EXCEL 173	69.7	44	59.5	35.7		
MWS Seeds	MWS 128	77.9	20	59.4	33.7		
MWS Seeds	MWS 135	85.4	4	58.7	38.0		
Pioneer Hi-Bred Int'l	Pioneer 25R47	80.2	14	56.8	32.7	82.2	76.8
Pioneer Hi-Bred Int'l	Pioneer 25R54	74.6	30	58.7	34.0		
Pioneer Hi-Bred Int'l	Pioneer 25R56	87.3	2	57.9	34.7		
Pioneer Hi-Bred Int'l	Pioneer 25R63	82.9	8	59.2	35.7		
Public	Bess	66.1	49	59.8	36.0		
Public	Ernie	54.8	56	59.4	31.0	63.6	58.7
Public	Kaskaskia	84.2	6	62.3	39.0	76.9	72.0
Public	Madison	59.4	53	58.3	35.0	66.8	66.9
Public	McCormick	58.6	55	59.6	31.3	66.8	65.1
Public	Patterson	66.0	50	58.9	36.3	67.9	62.0
Public	Roane	76.1	27	62.2	34.3	75.1	70.3
Public	Sisson	58.8	54	56.8	30.7	69.8	65.7
Public	Truman	72.9	33	57.2	38.0	74.4	70.3
UAP Distribution	Dyna-Gro 415	69.5	45	59.7	38.7	72.7	68.8
UAP Distribution	Dyna-Gro 421	70.7	39	59.5	33.3	76.2	
Wilken Seed Grains	Wilken W 102	70.9	38	60.2	38.3	71.8	64.7
Wilken Seed Grains	Wilken W 106	70.9	37	59.5	37.3	72.3	67.5
Wilken Seed Grains	Wilken W 110	77.3	21	60.5	37.0		
Wilken Seed Grains	Wilken W 124	77.0	22	60.3	37.3	72.1	67.8
Wilken Seed Grains	Wilken W 130	75.3	29	59.9	36.3	76.3	
Wilken Seed Grains	Wilken W 135	79.3	16	60.9	38.0	74.6	70.2
Wilken Seed Grains	Wilken W 204	65.3	51	59.1	36.7	71.7	68.3
	Trial Mean	75.3		59.6	35.8		
	LSD, 10%	4.5		1.6	5.5		
	CV, %	5.6		1.0	2.1		

Averaged over four varieties in this location, Gaucho seed treated increased yield by 7.2 bushels/acre.

**Table 7. Results of the 2007 wheat variety trial at Urbana, in east central Illinois.**

<u>Company</u>	<u>Variety</u>	<u>Yield</u>	<u>Yield</u>	<u>Test wt.</u>	<u>Height</u>	<u>2-yr avg</u>	<u>3-yr avg</u>
		bu/ac	Rank 1 to 56			lb/bu	in.
AgriPro COKER	Branson	68.9	22	57.8	28.7	88.4	
AgriPro COKER	COKER 9511	62.7	35	63.2	29.3	78.6	
AgriPro COKER	Cooper	68.9	23	58.4	28.0	85.9	93.2
AgriPro COKER	W1377	80.3	2	62.9	32.7		
CPS-Vigoro Seeds	Vigoro 9611	68.8	24	57.8	31.3	88.7	
CPS-Vigoro Seeds	Vigoro 9712	55.5	45	57.3	27.0		
CPS-Vigoro Seeds	Vigoro 9723	70.6	17	59.1	32.7		
DeRaedt Seed	DeRaedt 88	66.2	29	60.1	33.3	80.3	90.3
DeRaedt Seed	DeRaedt 98	59.7	38	57.8	30.0	76.6	
Excel Brand Seed	EXCEL 307	58.7	41	59.7	32.0	80.5	92.1
Excel Brand Seed	EXCEL 341	70.5	18	60.1	34.7		
Excel Brand Seed	EXCEL 343	65.6	30	60.2	30.0		
Excel Brand Seed	EXCEL 399	68.6	25	59.4	33.7	85.0	94.1
Excel Brand Seed	EXCEL 423	73.3	10	60.9	30.7		
Green Valley Seed	Willcross 733	59.0	40	60.3	32.0	79.0	88.2
Green Valley Seed	Willcross 736	79.6	3	58.1	32.3		
GROWMARK	FS 628	64.0	32	57.9	32.0		
GROWMARK	FS 634	57.7	43	60.8	31.3	77.9	88.8
GROWMARK	FS 637	70.4	19	58.4	30.0	87.3	
GROWMARK	FS 645	64.8	31	62.4	31.0	76.2	
GROWMARK	FS 8309	63.3	34	57.7	31.3	82.5	87.5
JGL	Exp 701	72.0	12	57.7	31.3		
JGL	Exp 702	79.1	4	58.3	31.7		
JGL	Exp 703	60.9	36	57.7	29.3		
Kaltenberg Seeds	KW53	73.4	8	58.9	30.7		
Kaltenberg Seeds	KW62	69.8	20	59.1	32.3		
Kaltenberg Seeds	KW63	71.4	14	58.6	30.3		
Kitchen Seed Company	KSC 406W	56.8	44	59.1	31.7		
Kitchen Seed Company	KSC 407W	48.6	52	59.3	30.3		
Lewis Hybrids	LEWIS 830	71.7	13	58.6	31.7		
Lewis Hybrids	LEWIS 841	68.2	26	58.7	30.7	86.5	
MWS Seeds	EXCEL 173*	35.0	56	55.8	30.0		
MWS Seeds	MWS 128	69.5	21	57.7	31.3		
MWS Seeds	MWS 135	77.6	5	59.0	33.0		
Pioneer Hi-Bred Int'l	Pioneer 25R47	72.0	11	56.6	30.3	86.9	98.8
Pioneer Hi-Bred Int'l	Pioneer 25R54	70.8	15	59.0	29.0		
Pioneer Hi-Bred Int'l	Pioneer 25R56	80.4	1	60.3	31.0		
Pioneer Hi-Bred Int'l	Pioneer 25R63	66.5	27	57.9	30.0		
Public	Bess*	42.8	54	60.5	27.0		
Public	Ernie*	40.0	55	58.7	23.7	67.1	74.5
Public	Kaskaskia	73.4	9	61.9	38.0	82.0	95.9
Public	Madison*	43.5	53	57.0	27.7	71.2	83.4
Public	McCormick	54.0	47	61.6	24.0	72.4	83.8
Public	Patterson	58.6	42	60.1	35.7	73.7	80.9
Public	Roane	73.8	7	62.6	28.3	83.9	92.5
Public	Sisson*	48.9	51	58.9	24.7	68.1	80.2
Public	Truman	55.2	46	61.2	30.3	74.0	84.7
UAP Distribution	Dyna-Gro 415	60.1	37	59.4	31.7	81.3	91.5
UAP Distribution	Dyna-Gro 421	53.5	48	56.9	26.0	67.9	
Wilken Seed Grains	Wilken W 102	51.5	50	58.7	33.7	71.9	84.1
Wilken Seed Grains	Wilken W 106	59.0	39	59.7	34.7	78.1	88.6
Wilken Seed Grains	Wilken W 110	70.6	16	60.7	33.3		
Wilken Seed Grains	Wilken W 124	74.1	6	62.2	35.7	85.3	93.7
Wilken Seed Grains	Wilken W 130	52.3	49	58.1	28.7	69.0	
Wilken Seed Grains	Wilken W 135	66.4	28	60.4	33.3	83.2	93.6
Wilken Seed Grains	Wilken W 204	63.3	33	59.4	33.3	82.4	92.1
	Trial Mean	65.0		59.5	31.2		
	LSD, 10%	4.3		1.2	1.9		
	CV, %	6.3		1.9	5.8		

Averaged over four varieties in this location, Gaucho seed treated increased yield by 7.1 bushels/acre.

\* These varieties suffered winter injury of more than 30%.

**Table 8. Results of the 2007 wheat variety trial at DeKalb, in north central Illinois.**

<u>Company</u>	<u>Variety</u>	<u>Yield</u>		<u>Test wt.</u>	<u>Height</u>	<u>2-yr avg</u>	<u>3-yr avg</u>
		<u>bu/ac</u>	<u>Rank</u> 1 to 56			<u>2006-07</u> bu/ac	<u>2005-07</u> bu/ac
AgriPro COKER	Branson	71.4	26	61.0	32.0	81.9	
AgriPro COKER	COKER 9511	56.9	47	63.5	28.7	68.2	
AgriPro COKER	Cooper	71.6	25	61.4	31.0	87.5	87.3
AgriPro COKER	W1377	82.1	3	63.3	35.0		
CPS-Vigoro Seeds	Vigoro 9611	74.9	19	60.6	32.7	83.4	
CPS-Vigoro Seeds	Vigoro 9712	63.8	35	61.6	32.3		
CPS-Vigoro Seeds	Vigoro 9723	74.0	22	60.5	36.0		
DeRaedt Seed	DeRaedt 88	65.4	32	62.1	34.7	79.2	80.8
DeRaedt Seed	DeRaedt 98	57.0	46	59.5	34.0	79.2	
Excel Brand Seed	EXCEL 307	61.7	39	61.4	35.3	79.1	80.2
Excel Brand Seed	EXCEL 341	69.2	31	62.0	35.0		
Excel Brand Seed	EXCEL 343	73.2	24	62.1	33.0		
Excel Brand Seed	EXCEL 399	69.5	30	62.0	34.7	81.3	81.3
Excel Brand Seed	EXCEL 423	75.0	18	62.5	31.0		
Green Valley Seed	Willcross 733	61.2	42	61.6	35.7	76.9	76.5
Green Valley Seed	Willcross 736	80.9	6	61.0	32.0		
GROWMARK	FS 628	79.6	8	60.2	35.3		
GROWMARK	FS 634	61.3	40	61.6	37.0	77.7	79.7
GROWMARK	FS 637	75.2	17	60.9	32.0	86.4	
GROWMARK	FS 645	79.8	7	64.3	32.0	86.4	
GROWMARK	FS 8309	59.5	43	61.4	29.7	77.2	79.9
JGL	Exp 701	78.7	9	59.2	34.7		
JGL	Exp 702	78.6	10	60.5	30.7		
JGL	Exp 703	54.6	50	58.9	31.0		
Kaltenberg Seeds	KW53	81.6	4	60.6	32.3		
Kaltenberg Seeds	KW62	77.4	12	60.7	35.7		
Kaltenberg Seeds	KW63	76.5	15	61.9	32.3		
Kitchen Seed Company	KSC 406W	57.7	44	61.5	34.0		
Kitchen Seed Company	KSC 407W	55.9	49	61.6	33.7		
Lewis Hybrids	LEWIS 830	77.9	11	60.8	37.7		
Lewis Hybrids	LEWIS 841	73.7	23	61.5	31.0	86.2	
MWS Seeds	EXCEL 173*	47.6	55	60.2	30.7		
MWS Seeds	MWS 128	76.7	14	61.0	31.7		
MWS Seeds	MWS 135	81.1	5	60.9	37.3		
Pioneer Hi-Bred Int'l	Pioneer 25R47	77.2	13	60.3	30.3	91.1	96.7
Pioneer Hi-Bred Int'l	Pioneer 25R54	63.3	37	61.2	28.0		
Pioneer Hi-Bred Int'l	Pioneer 25R56	86.7	1	61.8	31.0		
Pioneer Hi-Bred Int'l	Pioneer 25R63	64.5	34	60.5	31.3		
Public	Bess*	56.2	48	61.9	30.0		
Public	Ernie*	48.5	54	60.7	29.3	59.0	
Public	Kaskaskia	82.3	2	63.8	40.0	87.4	88.6
Public	Madison*	51.6	53	60.5	31.3	69.2	70.0
Public	McCormick	44.6	56	61.2	27.3	65.8	70.9
Public	Patterson	62.1	38	61.6	35.3	65.2	70.0
Public	Roane	75.9	16	63.7	30.7	84.2	85.6
Public	Sisson*	57.4	45	60.3	28.0	71.4	71.8
Public	Truman*	52.2	52	59.8	28.7	76.7	77.5
UAP Distribution	Dyna-Gro 415	63.6	36	62.1	35.7	79.1	80.3
UAP Distribution	Dyna-Gro 421	74.3	20	61.9	32.3	81.1	
Wilken Seed Grains	Wilken W 102	53.4	51	61.3	34.7	70.1	72.1
Wilken Seed Grains	Wilken W 106	65.3	33	62.3	36.7	81.3	80.1
Wilken Seed Grains	Wilken W 110	71.3	27	62.6	32.7		
Wilken Seed Grains	Wilken W 124	70.8	28	63.6	35.3	82.7	81.4
Wilken Seed Grains	Wilken W 130	74.1	21	62.2	30.7	81.7	
Wilken Seed Grains	Wilken W 135	70.4	29	62.6	35.3	82.0	83.6
Wilken Seed Grains	Wilken W 204	61.2	41	61.4	36.3	77.3	78.9
	Trial Mean	69.0		61.6	33.1		
	LSD, 10%	4.7		0.8	1.8		
	CV, %	6.4		1.3	5.1		

Averaged over four varieties in this location, Gaucho seed treated decreased yield by 3.4 bushels/acre.

\*Low yields of these varieties were partly related to winter injury.

**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>Stand-ability</u>	<u>Hessian fly</u>	<u>Leaf rust</u>	<u>Sept-oria</u>
Adler Seeds	565	V	M	S	E	T	E		MR	MR
	575	V	ME	S	E	M	E		MR	MR
Agripro COKER	Branson	V	ME	S	G	M	G	MR	MS	MR
	Cooper	V	M	S	G	M	E	S	MR	MR
	COKER 9312	V	E/ME	S	G	S	G	R	MR	R
	COKER 9511	V	ME	S	G	MT	G	S	I	R
	COKER 9553	V	E/ME	B	F	M	VG	S	MR	R
	W1377	V	ML	S	G	M	E		MR	MR
Beck's Hybrids	117	V	ME		E	M	E	G	MR	I
	122	V	ME		E	T	E	G	MR	I
Brown Seed Enterprises Inc	766	V	E	T	VG	M	VG	I	MR	MR
	ARISE 817	V	ME	T	VG	S	E	I	MR	MR
	ARISE 857	V	ME	T	VG	M	VG	I	R	MR
	ARISE 887	V	M	T	VG	M	VG	I	MR	MR
	ARISE X-21	V	ME	T	VG	M	VG	I	MR	MR
CPS-Vigoro Seeds	V9611	V	ME	S	VG	M	E		MR	MR
	V9710	V	E	S	VG	MS	E		MR	MR
	V9712	V	M	S	E	M	VG		I	MR
	V9723	V	ML	S	E	T	VG		I	I
Coops Creek Acres	EXCEL 410TW	V	M	S	E	M	VG	I	R	MR
DeRaedt Seed	88	V	M	T	E	MT	VG		MR	I
	98	V	ML	T	E	T	VG		MR	MR
Excel Brand Seeds	EXCEL 307	V	ME	S	E	M	VG	MR	R	R
	EXCEL 341	V	M	S	E	M	E	I	MR	MR
	EXCEL 343	V	M	S	VG	MS	E	I	MR	MR
	EXCEL 399	V	M	S	E	M	E	MR	MR	MR
	EXCEL 423	V	M	S	E	M	VG	I	MR	MR
	EXCEL 442	V	M	B	E	M	VG	I	R	MR
Green Valley Seed	Willcross 733	V	ME	S	E	M	E	R	R	MR
	Willcross 736	V	ME	S	E	M	E	S	R	MR
FS Seeds	FS 618	V	E	S	E	T	G	S	MR	MR
	FS 628	V	ME	S	E	T	E	NR	MR	MR
	FS 634	V	E	S	E	T	VG	MR	MR	MR
	FS 637	V	ME	S	E	MT	VG	MR	MR	MR
	FS 645	V	M	S	E	MT	G	S	MR	MR
	FX 8309	V	ML	S	E	M	E	S	MR	MR
Haas Seed House	EXCEL 343	V	M	S	VG	MS	E	I	MR	MR
Hartke Seed Farms	EXCELI 307	V	ME	S	E	M	VG	MR	R	R
Hoffman Seed House	EXCEL 173	V	E	S	VG	M	G	I	R	R
JGL	Exp 701	V	E	S	E	M	E		MR	MR
	Exp 702	V	L	S	E	MT	VG		MR	MR
	Exp 703	V	M	S	E	MT	VG		MR	MR
Kaltenberg Seed	KW53	V	M	S	VG	MT	VG		MR	MR
	KW62	V	M	S	E	MT	E		MR	MR
	KW63	V	M	S	VG	MT	VG		MR	MR
Kitchen Seed Company	KSC 406W	V	ME	S	E	M	E	R	R	MR
	KSC 407W	V	ME	S	E	M	E	R	MR	R
Lewis Hybrids	830	V	ME	S	VG	T	VG	I	MR	I
	841	V	ME	S	E	M	E	R	MR	MR

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>Stand-ability</u>	<u>Hessian fly</u>	<u>Leaf rust</u>	<u>Sept-oria</u>
Miles Seed	JUDITH	V	M	S	E	T	G	MR	MR	MS
	DINAH	V	M	S	E	M	E		R	MR
	LEAH	V	ME	S	VG	S	E		MR	MS
	LYDIA	V	E	B	F	M	G		MR	MR
	RACHEL	V	E	B	VG	M	VG		MR	MS
Miller Bros. Farm & Fertilizer	EXCEL 392TW	V	M	S	VG	M	VG	MR	R	MR
MWS Seeds LLC	EXCEL 173	V	ME	S	E	M	VG	MR	R	MR
	MWS 132	V	M	S	E	M	VG	MR	R	MR
	MWS 135	V	M	S	VG	M	E	MR	MR	MR
	MWS 128	V	ME	S	E	M	E	MR	I	MR
Pioneer Hi-Bred Int'l, Inc.	PIONEER 25R47	V	M	B	E	S	G	S	R	MR
	PIONEER 25R54	V	M	B	VG	M	VG	MR	I	I
	PIONEER 25R56	V	M	S	E	M	VG	R	MR	MR
	PIONEER 25R63	V	ME	B	VG	S	VG	S	MR	MR
	PIONEER 25R78	V	ME	B	VG	S	E	MR	MR	I
Public	Bess	V	ME	T	G	M	G	S	S	I
	Ernie	V	E	T	VG	S	VG	MS	MR	MR
	Kaskaskia	V	M	B	VG	MT	VG	S	MR	MR
	Madison	V	M	T	G	M	G	MS	MR	MR
	McCormick	V	ML	T	VG	S	VG	ND	ND	ND
	Patterson	V	ME	S	E	M	VG	R	MR	ND
	Roane	V	ML	S	VG	S	VG	MR	MS	MR
	Sisson	V	M	T	G	M	G	S	MS	MR
Truman	V	L	T	VG	MT	G	S	MR	MR	
UAP Distribution	Dyna Gro 410	V	ME	S	VG	M	VG	I	I	MR
	Dyna Gro 415	V	ME	S	VG	M	VG	I	I	MR
	Dyna Gro 421	V	M	S	VG	M	VG	I	MR	MR
	Dyna Gro 444	V	ML	B	VG	M	VG	I	MR	MR
Wilken Seed Grains, Inc.	Wilken 102	V	E	T	VG	M	VG	M	I	MR
	Wilken 106	V	ME	S	VG	M	VG	M	MR	MR
	Wilken 110	V	ME	S	E	M	VG	M	MR	MR
	Wilken 124	V	ML	B	E	M	VG	M	I	MR
	Wilken 130	V	ME	S	E	M	VG	M	MR	MR
	Wilken 135	V	M	S	E	M	VG	M	MR	MR
	Wilken 204	V	ML	S	E	M	VG	M	MR	MR

Codes:

Type:

V = variety; B = blend; H = hybrid

Maturity:

E = 2 or more days earlier than average; ME = 1-2 days early; M = medium maturity, or about average of most varieties grown in Illinois; ML = 1-2 days later than M; L = 2 or more days later than M

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

**Table 10. 2006 - 2007 Fusarium Head Scab evaluation of variety trial entries at Urbana.**

**Varieties with greater head scab resistance have lower rating or index numbers. Some varieties winterkilled in 2007.**

Company	Entry Name	2007					2006					
		Incidence	Severity	Kernel Rating	FHB Index	ISK Index	Incidence	Severity	Kernel Rating	FHB Index	ISK Index	DON
		(%)	(%)	(%) FDK	(0-100)	(0-100)	(%)	(%)	(%) FDK	(0-100)	(0-100)	(ppm)
AgriPro COKER	Benton	--	--	--	--	--	81.7	69.4	70	57.0	73.3	17.5
AgriPro COKER	Branson	50.0	49.3	30	26.4	41.8	70.0	78.6	43	54.8	61.9	10.8
AgriPro COKER	Cooper	95.0	68.8	63	65.1	74.4	65.0	66.0	53	42.7	60.7	10.5
AgriPro COKER	Coker 9312	--	--	--	--	--	85.0	54.7	43	46.2	59.3	9.8
AgriPro COKER	Coker 9436	--	--	--	--	--	70.0	55.7	53	37.2	59.0	13.8
AgriPro COKER	Coker 9511	70.0	22.1	20	15.5	35.6	60.0	11.0	22	6.2	30.0	4.0
AgriPro COKER	Coker 9553	--	--	80	--	--	73.3	76.2	60	55.7	68.9	15.0
Excel Brand Seeds	Excel 173	--	--	20	--	--	41.7	40.6	33	20.9	38.0	5.0
Excel Brand Seeds	Excel 176	--	--	--	--	--	60.0	66.9	25	40.1	48.1	6.8
Excel Brand Seeds	Excel 211	--	--	--	--	--	50.0	55.2	27	27.1	42.2	4.5
Excel Brand Seeds	Excel 307	40.0	53.9	17	24.9	34.9	40.0	47.6	27	21.3	36.9	4.3
Excel Brand Seeds	Excel 341	56.7	54.9	13	32.1	38.8	--	--	--	--	--	--
Excel Brand Seeds	Excel 361	--	--	--	--	--	55.0	34.8	13	23.8	32.3	1.3
Excel Brand Seeds	Excel 343	53.3	46.1	17	25.3	36.5	--	--	--	--	--	--
Excel Brand Seeds	Excel 392 TW	46.7	62.9	27	31.7	43.5	81.7	75.6	60	61.4	71.2	16.5
Excel Brand Seeds	Excel 399	43.3	49.5	12	21.9	32.5	51.7	65.3	20	34.1	43.1	4.0
Excel Brand Seeds	Excel 400-1	--	--	--	--	--	35.0	55.2	30	19.7	39.1	8.0
Excel Brand Seeds	Excel 410 TW	50.0	58.2	18	29.6	39.8	60.0	56.7	43	33.9	52.3	8.0
Excel Brand Seeds	Excel 423	90.0	45.3	43	41.6	57.9	--	--	--	--	--	--
Excel Brand Seeds	Excel 442	50.0	60.5	20	29.3	41.1	33.3	60.2	27	20.6	38.7	5.5
GROWMARK	FS 618	60.0	66.3	27	40.3	48.6	--	--	--	--	--	--
GROWMARK	FS 628	70.0	56.9	57	38.9	60.7	--	--	--	--	--	--
GROWMARK	FS 634	60.0	61.0	27	38.3	47.0	41.7	62.3	25	26.9	41.2	8.0
GROWMARK	FS 637	90.0	71.1	70	64.6	76.3	93.3	74.6	67	69.3	77.0	8.5
GROWMARK	FS 645	63.3	65.3	37	41.5	53.3	60.0	40.6	30	24.1	42.2	7.5
GROWMARK	FS 657	--	--	--	--	--	78.3	85.3	60	66.6	73.1	18.3
GROWMARK	FS 8302	--	--	--	--	--	61.7	60.5	50	37.9	56.7	13.5
GROWMARK	FS 8309	13.3	19.0	27	2.6	20.4	53.3	42.1	37	23.1	43.3	4.5
JGL	JGL 603	--	--	--	--	--	56.7	56.5	37	31.7	48.6	7.0
JGL	JGL 604	--	--	--	--	--	66.7	60.6	63	40.5	63.5	14.5
JGL	Exp 701	86.7	64.7	57	55.8	68.1	--	--	--	--	--	--
JGL	Exp 702	81.7	72.3	37	58.8	60.9	--	--	--	--	--	--
JGL	Exp 703	72.5	59.8	40	44.8	55.7	--	--	--	--	--	--
Miles Seed	EXSEGEN Rachel	--	--	40	--	--	--	--	--	--	--	--
Miles Seed	EXSEGEN Lydia	95.0	68.1	73	65.0	78.2	--	--	--	--	--	--
Miles Seed	EXSEGEN Dinah	60.0	35.5	20	22.8	36.7	--	--	--	--	--	--
Ohio Seed Improvement Assn	Bravo	--	--	--	--	--	73.3	58.8	37	43.6	54.3	14.8
Pioneer Hi-Bred International	Pio 25R37	--	--	--	--	--	76.7	42.4	53	32.8	57.1	14.0
Pioneer Hi-Bred International	Pio 25R47	63.3	46.4	60	29.3	56.9	75.0	63.7	43	47.3	58.9	18.3
Pioneer Hi-Bred International	Pio 25R51	--	--	--	--	--	26.7	16.6	30	4.4	25.0	6.0
Pioneer Hi-Bred International	Pio 25R54	56.7	35.2	27	20.1	38.2	56.7	42.4	27	27.1	40.4	9.3
Pioneer Hi-Bred International	Pio 25R56	23.3	39.1	33	9.6	32.1	--	--	--	--	--	--
Pioneer Hi-Bred International	Pio 25R63	70.0	47.9	53	35.1	56.7	56.7	63.2	47	37.3	54.7	21.5
Pioneer Hi-Bred International	Pio 25R78	63.3	54.8	37	35.7	50.1	70.0	80.7	47	56.5	63.9	15.5
Public	Bess	70.0	46.3	28	32.4	45.9	--	--	--	--	--	--
Public	Cardinal	--	--	--	--	--	70.0	72.5	53	50.3	64.1	12.3
Public	Ernie	90.0	54.8	33	49.3	57.4	33.3	44.7	7	14.9	26.1	3.5
Public	Kaskaskia	36.7	36.9	33	13.5	35.4	61.7	60.1	38	38.2	51.8	12.8
Public	Madison	--	--	--	--	--	76.7	73.0	70	56.3	72.9	10.8
Public	McCormick	92.5	59.4	50	55.2	65.6	71.7	59.3	37	43.1	54.0	10.3
Public	Patterson	50.0	60.0	30	34.0	45.0	73.3	82.0	33	58.4	59.9	11.0
Public	Roane	63.3	41.6	17	28.6	38.2	66.7	47.8	27	34.6	45.0	5.0
Public	Sisson	86.7	64.0	50	55.4	65.2	96.7	54.8	57	53.5	68.1	17.0
Public	Truman	40.0	17.3	13	7.0	19.2	53.3	62.8	15	34.6	40.9	1.8
University of Illinois	IL94-1653	63.3	60.5	40	38.2	53.2	76.7	51.4	40	39.7	54.4	8.0
	Test Average	61.3	52.4	33.2	34.0	47.0	60.1	56.3	37.9	35.7	50.1	9.4
	LSD (0.05)	29.1	21.3	18.0	22.9	15.9	26.3	21.5	19.2	19.6	14.6	6.0

Data are from Dr. Fred Kolb's wheat breeding program, and include some of the varieties entered into the wheat variety trial..

The test nursery was inoculated and mist irrigated.

Incidence = the percent of heads in a row with symptoms.

Kernel rating = the percent of shriveled seed.

**Low ratings or index numbers mean higher resistance.**

DON (2006 only) is amount of the vomitoxin DON (low is good).

Severity = the percent of spikelets in a head with symptoms.

FHB Index = incidence x severity/100.

ISK Index combines incidence, severity, and the % shriveled seed.