WHEAT PERFORMANCE IN ILLINOIS TRIALS - 2008 Crop Sciences Special Report 2008-01, July 2008

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Even with the damage to the 2007 Illinois wheat crop from the early April freeze, high prices going into the fall of 2007 and decent planting conditions helped wheat acreage to rebound, with about 1.2 million acres planted in the fall of 2007. This is the highest planted acreage since 1998. The harvest of the 2007 corn and soybean crops was relatively early, and wheat planting was timely in most areas. There were some wet areas, but in general it was a favorable fall for wheat, and the crop condition in most areas was good heading into dormancy.

The winter was relatively benign, with the only challenges to the wheat crop coming from high rainfall in some areas, and both standing water and ice. This caused serious damage to the crop in some areas of northern Illinois, including the trial near DeKalb. That trial was abandoned as a result of uneven injury that ruled out getting useful data.

March 2008 was cool and wet, in contrast to the warm and dry conditions in March 2007. April continued to be cool and wet, with considerable concern about loss of nitrogen in many fields. The weather in May continued this trend, and the lack of warm temperatures delayed heading by a week or more in the southern part of the state and by two weeks or more in central and northern parts of the state. As an example, the median heading date in the Brownstown trial was May 19, which is about two weeks later than normal.

While cool temperatures delayed development, they also limited the production of disease inoculum and favored the growth of wheat, so the crop was in very good condition by early June. Fungicides were applied on a large number of acres, especially for control of Fusarium head scab. Perhaps due to lack of inoculum, this disease was not very damaging in Illinois in 2008. Some leaf diseases appeared late, but fungicide application in some trials produced little yield response. Barley yellow dwarf, which is carried into fields by aphids, seemed to be at a very low level in 2008; seed treatment fungicides produced little or not yield increase, either because aphids were not a factor or perhaps because aphids did not carry BYDV when they came into fields. Entries made in the variety trials using both insecticide-treated and untreated seed showed little difference in yield, as you can see in the tables.

Normal temperatures returned in June, but harvest took place a week to two weeks later than normal, reflecting the late heading but a more or less normal length of filling. Yields in most areas were surprisingly good given the wet spring weather. The July crop report indicates that statewide yield was 66 bushels per acre, which is only one bushel less than the record-high yield of 67 in 2006.

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 also treated seed of several varieties with insecticide at each location as a test of yield response to this input.

<u>Location</u>	<u>Cooperators</u>	Soil type	<u>Planted</u>	N fertilizer	<u>Harvest</u>
Dixon Springs	Steve Ebelhar Carl Hart, Jr.	Grantsburg silt loam	Oct. 11	25 Fall 95 Spring	June 18
Belleville	Ron Krausz	Ebbert silt loam	Oct. 12	30 Fall 80 Spring	June 26
Brownstown	Lindell Deal	Cisne silt loam	Oct. 9	30 Fall 70 Spring	June 2
Orr Center	Mike Vose	Clarksdale silt loam	Oct. 2	40 Fall 60 Spring	July 7
Urbana	Bob Dunker Mike Kleiss	Flanagan silt loam	Sept. 26	40 Fall 40 Spring	July 9
DeKalb	Lyle Paul Dave Lindgren	Drummer silty clay loam	Sept. 21	40 Fall 40 Spring	Abandoned

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

Participating Companies

We thank these companies for their support of this program in 2008.

Agrinetics, Inc. 1764 Windward Ave Naperville, IL 60563 (630) 417-4265

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

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

Bohl Bros. 7826 N 16000 E Rd Grant Park, IL 60940 (815) 465-6922

BioTown Seeds 373N Diener Rd Reynolds, IN 47980 (219)984-5247

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

Cappel Certified Seeds 12629 Hwy 38 W Rochelle, IL 61068 (815) 562-3978

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

Crop Production Services PO Box 1467 Galesburg, IL 61402-1467 (309) 342-4100 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 4th St Hoffman, IL 62250 (618) 495-2617

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 Farm Supply, LLC PO Box 22879 Owensboro, KY 42304 (270) 926-2420

Miller Bros. Farm & Fertilizer 2001 Niemansville 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

Steyer Seeds 6154 N Co Rd 33 Tiffin, OH 44883 (800) 231-4247

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

Wilken Seed Grains, Inc. P O Box 770 Pontiac, IL 61764 (815) 844-3458