WHEAT PERFORMANCE IN ILLINOIS TRIALS - 2006 Crop Sciences Special Report 2006-01, July 2006

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Following good wheat and doublecrop soybean yields in 2005, wheat acreage rebounded in Illinois for 2006, with 900,000 acres planted in the fall of 2005. Wheat planted in the fall of 2005 got off to an average start, but cool temperatures in the fall resulted in somewhat less growth than usual at the time of dormancy.

Much of the winter was warmer than normal, and there was more growth than usual during January and February. Some water stood in fields in places, but there was only limited freezing and thawing, and the crop came through the winter in fairly good condition. The weather in March and April was good for the wheat crop, with cool temperatures and some sunny days, and thus good conditions for tillering. Rainfall was more or less normal during April and May, but temperatures were favorable, and the weather was dry enough that few fungal diseases developed. There was, however, a substantial amount of barley yellow dwarf virus (BYDV) present in some fields, especially in the variety trials where the grass around the fields might have harbored the aphids that transmit this disease. Due to the uniform height of affected plants, we think that most of the aphid flight was in the late winter rather than in the fall. Heading was at about the normal time, and warm temperatures brought the crop along rapidly. Harvest was up to a week ahead of normal.

According to the July 2006 estimate, yield on acres harvested this year is 68 bushels per acre, surpassing the 2003 yield of 65 bushels for a new record. Yields in all of the variety trials reported here were good to excellent. This was despite the fact that BYDV ratings at the three Southern Illinois locations showed substantial amounts of the disease on most varieties. Seed treatment insecticide (Gaucho), which provides some protection against the aphids that transmit BYDV, produced a yield increase of 8.6 bushels per acre averaged across four varieties and three Southern Illinois locations. The same treatment increased yield by only 1.8 bushels per acre in the northern region, reflecting the much lower BYDV incidence in that part of Illinois.

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. While we allowed seed companies to include entries treated with seed-applied insecticide (Gaucho or Cruiser), such entries have to be identified in their 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>	Soil type	PlantedN fert	<u>ilizer</u> <u>Harve</u>	<u>est</u>		
Dixon Springs	Steve Ebelhar Ron Hines	Grantsburg silt loam	Oct. 11	25 Fall 95 Spring	June 15		
Belleville	Ron Krausz	Ebbert silt loam	Oct. 7	30 Fall 80 Spring	June 19		
Brownstown	Lindell Deal	Cisne silt loam	Oct. 7	30 Fall 70 Spring	June 19		
Orr Center	Mike Vose	Clarksdale silt loam	Oct. 2	40 Fall 60 Spring	June 22		
Urbana	Bob Dunker Mike Kleiss	Flanagan silt loam	Oct. 4	40 Fall 40 Spring	June 27		
DeKalb	Lyle Paul Dave Lindgren	Drummer silty clay loam	Sept. 22	40 Fall 40 Spring	July 10		
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Participating Companies

Following is a list of addresses and phone numbers of companies that entered wheat varieties in the 2006 University of Illinois trials reported in this publication. We thank these companies for their support of this program, which is designed as a neutral comparison of all wheat varieties available for production in Illinois.

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

AgriPro COKER Box 411 East 8th St Brookston, IN 47923 (765) 563-3111

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

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

Excel Brand Seeds Box 320 Camp Point, IL 62320 (888) 593-7707

Green Valley Seed P.O. Box 135 Kahoka, MO 63445 (660) 727-3341

FS Seeds 1701 Towanda Ave. Bloomington, IL 61701 (309) 557-6399

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

Kaltenberg Seed P.O. Box 278 Waunakee, WI 53597 (608) 849-5021 Lewis Hybrids, Inc 530 West Maple Ave. Ursa, IL 62376 (800) 252-7851

Merschman Seeds, Inc 103 Ave. D. West Point, IA 52656 (800) 848-7333

Miles Seed P.O. Box 22879 Owensboro, KY 42304 (800) 685-0877

Ohio Seed Improvement Assoc 6150 Avery Rd. Dublin, OH 43013 (614) 889-1136

Pioneer Hi-Bred International 14171 Carole Drive Bloomington, IL 61704 (800) 950-3489

Royster-Clark, Inc. 717 Robinson Road SE Washington C.H., OH 43160 (800) 659-7790

Steyer Seeds 6154N Co. Rd. 33 Tiffin, OH 44883 (800) 231-4274

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

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