WHEAT PERFORMANCE IN ILLINOIS TRIALS - 2022 Crop Sciences Special Report 2022-01, July 2022

Darin K. Joos and Jessica Rutkoski Department of Crop Sciences, University of Illinois, Urbana

Overall the 2022 winter wheat growing season was good, but not excellent. At the beginning of May, the USDA projected average yield was 75 bushels per acre, just 4 bushels per acre lower than observed during the record-breaking 2021 season. Based on tiller counts from 63 fields across Southern IL done on May 24th, the Illinois Wheat Association (IWA) predicted that the average yield in Southern Illinois would be 69 bushels per acre. In many fields, stands were thinner than ideal. Later than optimal planting was likely to blame, as the weather during October 2021 was consistently rainy, making timely planting difficult. Once planted, high rainfall may have hindered establishment in some fields. While the actual average yield is still being determined, it seems that many growers were pleasantly surprised by the yield in spite of the circumstances.

Beyond yield, grain quality tended to be high. Dry conditions during grain filling and during harvest promoted high test weights and low vomitoxin levels. In fact, very little vomitoxin was detected this year. In part due to high wheat prices, most wheat growers applied a fungicide at flowering to control head scab. Without a doubt, this fungicide application played a role in keeping vomitoxin at bay.

It's worth mentioning that this season coincided with the Russian invasion of Ukraine. This war continues to affect US wheat growers and the public at large via its impact on the prices of fuel, fertilizer, and commodities. To promote increased crop production and mitigate rising food prices, just this July, the US Department of Agriculture expanded crop insurance for wheat-soybean double-cropping so that more counties are eligible. Additionally, the profitability of wheat-soybean double-cropping in 2023 is expected to be high in southern as well as in central Illinois given current commodity prices.

To aid variety selection decisions, we present these wheat variety testing results from 6 locations across the state of Illinois. 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 seedapplied insecticide have insecticide treatment identified by the product trade name in the tables.

			Planting	N	Harvest
Location	Cooperator	Soil type	date	fertilizer	date
Elkville	Trent Funk	Hurst silt loam	Oct. 10	30 Fall 110 Spring	June 15
Belleville	Dane Hunter	Ebbert silt loam	Oct. 5	30 Fall 85 Spring	June 18
St Peter	Russ Schwarm	Hoyleton silt loam	Sept. 29	0 Fall 120 Spring	June 21
Perry/Orr Center	Luke Merritt	Clarksdale silt loam	Oct. 8	30 Fall 80 Spring	June 28
Urbana	Nick Eisenmenger	Flanagan silt loam	Oct. 1	30 Fall 40 Spring	June 29
Hampshire	Dezeri DeRaedt	Drummer silt loam	Sept. 25	30 Fall 80 Spring	July 14

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 2022.

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

American Organic 1676 CR 2200 E St Joseph, IL (217) 469-2351

BioTown Seeds 373 N Diener Rd Reynolds, IN 47980 (219) 984-6038

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

Dyna-Gro Seed 200 W 2nd St. Flora, IL 44818 (618) 578-0660

FS Wheat 1701 Towanda Ave., PO 2500 Bloomington, IL 61701 (309) 557-6399 Grow Pro Genetics 375 N US Old Route 66 Hamel, IL 62046 (815) 370-3291

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

Hoffman Seed House PO Box 66 Hoffman, IL 62250 (618) 495-2617

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

Kratz Farms LLC 4380 Sherman Road Slinger, WI 53086 (262) 305-6631

KWS Cereals 4101 Colleen Dr Champaign, IL 618/22 217-800-1008 Monier Seed & Service 846 Yankee Lane Sparland, IL 61565 (319) 464-5708

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

Viking 1414 W Main, PO Box 127 Albert Lea, MN 56007 (800) 352-5247

VCIA 9225 Atlee Branch Lane Mechanicsville, VA 23116 (804) 746-4884

Williamsfield Seed Co. 1122 Knox Highway 18 Williamsfield, IL 61489 (309) 639-2248