

WHEAT PERFORMANCE IN ILLINOIS TRIALS - 2018
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The 2017-18 Illinois wheat season was somewhat unusual, with good (but not great) yields and fair grain quality. Planted acres for 2018 were 590,000, up from 500,000 acres in 2017. Harvested area was 550,000 acres, up from 470,000 acres in 2017. The July yield estimate for Illinois wheat was 69 bushels per acre, down from 76 bushels per acre (an Illinois record) in 2017.

Wheat planting in the fall of 2017 proceeded normally, with about 80% of the crop planted by the end of October. The crop emerged and grew well, with near-normal crop ratings (good + excellent above 60%) by December. The crop overwintered without any serious issues, except for some heavy rain in February that caused some flooding and ice damage in places. The weather was cool in March and April, and the crop was considerably behind normal in the start to heading; only 5% of the state’s crop was headed by the end of April, compared to an average of about 20%. It warmed up quickly in early May and stayed warm, causing the development of the wheat crop to catch up; by May 13, 48% was headed compared to the normal of 51%.

Besides being warm, May was relatively dry in many areas. This, along with limited production of inoculum during the cool April weather, resulted in little development of fungal diseases, including Fusarium head scab. The warm weather continued through May into June, and after the slow start to heading, harvest moved ahead of normal by mid-June; 30% of the crop was harvested by June 17 compared to the average of 19%. This trend continued, with 83% of the crop harvested by July 1, compared to the average of 67%. Even with little Fusarium head scab, grain quality was only average, with test weights in the mid-50s in many fields.

The sudden change from cool to warm temperatures in early May had a number of effects: 1) less tillering and lower head numbers; 2) rapid stem growth and possibly weaker stems; 3) shorter heads and fewer kernels per head; and 4) a shorter grain filling period. This resulted in lower yields than we had hoped, lower test weights, and lodging in some fields, possibly related to rapid growth, although plants were not taller than normal. We rated lodging at locations where lodging may have affected yields of some varieties.

The 2017-18 wheat variety trials were planted and harvested on time – 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 The 2016-17 wheat season was a very good one in Illinois, with good yields and good quality. Planted acres for 2017 were 520,000, the same as in the previous year. Harvested area was 490,000 acres in 2017, up slightly from 470,000 acres in 2016. The July 1 yield estimate for Illinois wheat was 75 bushels per acre, one bushel above the yield in 2016 and a new record-high yield for Illinois.

Location	Cooperator	Soil type	Planting date	N fertilizer	Harvest date
Elkville	Trent Funk	Colp silt loam	Oct. 2	30 Fall 110 Spring	June 18
Belleville	Ron Krausz	Ebbert silt loam	Oct. 5	30 Fall 85 Spring	June 18
Neoga	Dennis Brown	Bluford silt loam	Oct. 9	30 Fall 100 Spring	June 19
Perry/Orr Center	Mike Vose	Clarksdale silt loam	Sept. 29	30 Fall 80 Spring	June 20
Urbana	Jeff Warren	Flanagan silt loam	Sept. 26	30 Fall 40 Spring	June 28
Hampshire	Dezeri DeRaedt	Drummer sily clay loam	Sept. 25	30 Fall 80 Spring	July 12

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 2018.

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

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

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

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

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

Albert Lea Seed
1414 W Main
Albert Lea, MN 56007
www.alseed.com

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

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

Beck's Hybrids
6767 E 276th St
Atlanta, IN 46031
(800) 937-2325

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

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

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

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

Virginia Crop Improvement
9225 Atlee Branch Lane
Mechanicsville, VA 23116
(804) 746-4884

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

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

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

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

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

Martin Seeds, Inc.
10045W Second
Williamsport, IN 47993
(765) 986-2030