

**CROPS**

# Corn stands tall

By JERILYN JOHNSON

**T**HE 2007 growing season was a great one, unless you happened to be in one of those areas of the state where the rain wouldn't quit. Or maybe you were caught in an area where rain just wouldn't fall. Missouri's unpredictable weather really outdid itself this year, and yet yields at most sites in the Missouri 2007 Corn Performance Tests ended up at or above average in spite of Mother Nature.

Plots in the north region had a particularly tough summer. "The test at Craig, in northwest Missouri, was planted on May 23 and was flooded a few weeks later when the levee on the Tarkio River was breached," says Howard Mason, University of Missouri crop variety testing research specialist.

The Albany test was replanted June 5 after a 7.5-inch rain fell in early May, hindering germination and emergence of the crop. Rainfall then came up short later in the season. Another storm hit in early August, causing lodging and increased variability in test plots at Albany, Mooresville and Novelty.

The irrigated test at Harrisonville was planted on April 24 and in the next 60 days received 23.2 inches of rain. "These two experiments were abandoned because the plants that were left were few and far between, and it was too late to replant," Mason says.

**Dry end of the spectrum**

On the other extreme, the test at Truxton was planted on May 14 and for the rest of the summer only received about 8 inches of rainfall. That experiment was harvested, but yields averaged only 73.7 bushels per acre.

Yields in the north region were average or below at all locations except LaGrange, where yields averaged 228 bushels per acre.

European corn borers also threw a curve at this year's hybrids, as pressure was heavy at most sites in north and central Missouri. Mason points out that this contributed to significant lodging at several locations.

Irrigated corn tests in central, southwest and southeast Missouri continued to perform well. "Over the last few years, irrigation has boosted corn yields by about 72 bushels an acre at locations where we test both irrigated and nonirrigated corn hybrids," Mason says.

Yields on irrigated sites in the southeast region were eye-popping. A stacked

**Key Points**

- MU corn hybrid test plots faced variable amounts of moisture this year.
- Too much or too little moisture affected yield averages.
- Studying results can help producers select best hybrids for their farm.

Pioneer 33N58 hybrid in the new-technology test topped that trial, yielding 271.1 bushels per acre. A Gateway 4916 stacked hybrid topped the region's irrigated corn test at 274.1 bushels.

Yield summaries, in tables below, show only the highest-yielding hybrid in each region, along with all other hybrids that are statistically similar. Trials are grown on farms of the MU Agricultural Experiment Station and cooperating farmers across the state.

**MU test objective**

This report is a contribution of the Division of Plant Science in the MU College of Agriculture, Food and Natural Resources. Fees provided by companies submitting hybrids for evaluation supported the work.

Variety selection continues to be the main point promoted by MU Variety Testing. "Simply by studying our report, a producer can increase the likelihood of selecting a hybrid that will perform well the subsequent year," Mason says. "Be sure to evaluate your selections at multiple locations and/or multiple years to increase the precision of your decision."

For further data, go online to [agebb.missouri.edu/cropper/vartest](http://agebb.missouri.edu/cropper/vartest).

To obtain a CD version of the report, call the MU agronomy plant sciences unit office at 573-882-2307, or visit your local Extension office for a free copy.



**Central Irrigated Corn Test**

Brand/Hybrid	Mean
Garst 8353CB/LL	240.9**
Garst 8378YG1	234.5*
Dekalb RX785RR2/YGCB	231.2*
Dekalb DKC63-46 (RR2/YGCB)	229.0*
NuTech 3C-714 RR/YGCB	227.8*
Fielder's Choice NG 6810	227.1*
Dekalb RX715RR2/YGCB	227.0*
NuTech 0C-413 YGCB	226.8*
Garst 8294YG1/IT	224.4*
<b>TEST AVERAGE</b>	<b>214.8</b>
LSD at 0.10	16.6
CV %	8.0

\*\* Highest-yielding hybrid in the test.  
\* Yield not significantly less than the highest-yielding hybrid in the test.  
LSD = least significant difference  
CV% = coefficient of variation percentage

**Central Nonirrigated Corn Test**

Brand/Hybrid	Mean
Kruger 8112HX	189.9**
Dekalb DKC61-73 (RR2/YGCB)	188.1*
Kruger 5010YGCB	186.4*
Pioneer 33K40 (HX1, LL)	185.9*
Kruger 5013YGCB	185.2*
Fontanelle 8B467	184.1*
Kruger 5514YGCB	183.3*
Dyna-Gro 57F87	183.0*
Kruger 0115	182.5*
Lewis 5365 CB/RR	182.5*
<b>TEST AVERAGE</b>	<b>175.1</b>
LSD at 0.10	7.6
CV %	7.0

\*\* Highest-yielding hybrid in the test.  
\* Yield not significantly less than the highest-yielding hybrid in the test.  
LSD = least significant difference  
CV% = coefficient of variation percentage

**Seven decades and still growing**

**T**HE 2007 test was the University of Missouri Variety Testing's 70th year of testing corn hybrids.

"Our program continues to grow and evaluate both new and existing corn hybrids that are available to producers," points out Howard Mason, MU crop variety testing research specialist. "With the expanding number of biotech traits, seed treatments and new hybrids released each year, we will be busy far into the future."

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