



300 Bushel Attempt – 2008

Planted: April 30, 2008
Harvested: October 2, 2008
Soil Type: Ragsdale Silt Loam
Population: Various
Fertilizer: Various

Previous Crop: Soybeans
Tillage: Disc & Chisel / Field Cultivator
Herbicide: 3 qts. Degree Xtra
 1 qt. Atrazine / 24 oz. Durango
Insecticide: 6 oz. Artic

RAINFALL	
April	4.64 in.
May	6.36 in.
June	3.12 in.
July	8.90 in.
August	<u>0.80 in.</u>
Total	23.82 in.

Purpose: For the 2008 attempt at 300 bushel corn per acre, this study was set up to test four hybrids planted at both 34,000 plants per acre and 38,000 plants per acre, split applying nitrogen, and spraying fungicide and insecticide at full tassel. Results from various studies in 2007 showed some significant yield increases using these approaches. This year's study was also moved to a corn-after-soybean rotation compared to the corn-after-corn rotation that was used in the past. In previous attempts, the total rate of nitrogen applied never exceeded 240 lbs. per acre. All nitrogen was applied as 28% liquid nitrogen. Side-dress applications were made at the V3 growth stage.

Yield Rank	Brand	Planted Population	Test* Weight	Percent Moisture	Bushels* Per Acre	Net^ Return
30" ROWS - 190# SIDEDRESS + 30# N 2X2						
1	BECK 6733HXR™**	34,000	60.0	19.2	234.3	\$965.05
2	BECK 5444VT3	34,000	57.1	16.5	220.3	\$897.72
3	BECK EX 8719 (5784RR Genetics)	34,000	57.1	19.0	209.3	\$842.72
4	BECK 6722VT3	34,000	<u>58.0</u>	<u>20.1</u>	<u>200.7</u>	<u>\$799.72</u>
	AVERAGE		58.1	18.7	216.2	\$876.30
1	BECK 6733HXR™**	38,000	60.6	19.7	240.1	\$985.55
2	BECK 5444VT3	38,000	57.1	16.8	211.3	\$844.54
3	BECK EX 8719 (5784RR Genetics)	38,000	56.5	19.4	209.0	\$833.04
4	BECK 6722VT3	38,000	<u>58.4</u>	<u>20.1</u>	<u>200.7</u>	<u>\$791.54</u>
	AVERAGE		58.2	19.0	215.3	\$863.66
30" ROWS - 220# SIDEDRESS + 30# N 2X2						
1	BECK 6733HXR™**	34,000	60.0	19.8	244.8	\$999.25
2	BECK EX 8719 (5784RR Genetics)	34,000	55.9	19.6	221.5	\$885.42
3	BECK 6722VT3	34,000	57.8	20.2	212.7	\$841.42
4	BECK 5444VT3	34,000	<u>57.1</u>	<u>16.7</u>	<u>205.5</u>	<u>\$805.42</u>
	AVERAGE		57.7	19.1	221.1	\$882.88
1	BECK 6733HXR™**	38,000	60.5	19.8	239.0	\$961.75
2	BECK 5444VT3	38,000	56.8	16.6	228.3	\$911.24
3	BECK EX 8719 (5784RR Genetics)	38,000	55.9	20.0	225.5	\$897.24
4	BECK 6722VT3	38,000	<u>57.7</u>	<u>20.4</u>	<u>210.0</u>	<u>\$819.74</u>
	AVERAGE		57.7	19.2	225.7	\$897.49
30" ROWS - 270# SIDEDRESS + 30# N 2X2						
1	BECK 6733HXR™**	34,000	60.4	19.9	251.7	\$1,003.25
2	BECK EX 8719 (5784RR Genetics)	34,000	56.9	19.4	227.2	\$883.42
3	BECK 5444VT3	34,000	57.9	17.9	220.3	\$848.92
4	BECK 6722VT3	34,000	<u>57.1</u>	<u>20.5</u>	<u>214.8</u>	<u>\$821.42</u>
	AVERAGE		58.1	19.4	228.5	\$889.25
1	BECK 6733HXR™**	38,000	59.7	20.4	247.3	\$972.75
2	BECK EX 8719 (5784RR Genetics)	38,000	56.6	19.9	229.4	\$886.24
3	BECK 5444VT3	38,000	56.9	17.7	228.3	\$880.74
4	BECK 6722VT3	38,000	<u>57.5</u>	<u>21.3</u>	<u>202.0</u>	<u>\$749.24</u>
	AVERAGE		57.7	19.8	226.8	\$872.24

300 Bushel Attempt – Continued

Yield Rank	Brand	Planted Population	Test* Weight	Percent Moisture	Bushels* Per Acre	Net [^] Return
30" ROWS - 270# SIDEDRESS + 30# N 2X2 + HEADLINE / MUSTANG FULL TASSEL						
1	BECK 6733HXR ^{TM**}	34,000	60.1	20.1	225.9	\$844.25
2	BECK EX 8719 (5784RR Genetics)	34,000	56.2	19.7	224.2	\$838.42
3	BECK 6722VT3	34,000	56.2	21.6	218.1	\$807.92
4	BECK 54444VT3	34,000	<u>57.4</u>	<u>17.9</u>	<u>206.3</u>	<u>\$748.92</u>
	AVERAGE		57.5	19.8	218.6	\$809.88
1	BECK EX 8719 (5784RR Genetics)	38,000	56.9	19.3	238.4	\$898.25
2	BECK 54444VT3	38,000	57.4	17.7	225.3	\$835.74
3	BECK 6733HXR ^{TM**}	38,000	59.2	19.5	218.2	\$800.24
4	BECK 6722VT3	38,000	<u>56.8</u>	<u>20.8</u>	<u>210.4</u>	<u>\$761.24</u>
	AVERAGE		57.6	19.3	223.1	\$823.86

*Bushels per acre and test weight corrected to 15% moisture. **XL Brand distributed by Beck's Superior Hybrids, Inc.

[^]Net return based on \$5.00 corn minus nitrogen costs of \$330/ton 28% liquid nitrogen and seed costs of \$163.71/bag for VT3 hybrids and \$170.10/bag for HXR hybrids.

Summary: Although the 300 bushel per acre goal was not met in 2008, the 3rd highest yield in the study's four year history was recorded at 251.7 Bu./A. by planting BECK 6733HXR^{TM**} at 34,000 plants per acre in 30" rows using 300 lbs. of nitrogen split applied with 30 lbs. applied 2x2 at planting and 270 lbs. being side-dressed at V3. This was also the entry with the highest individual net return. In this year's study the application that provides the highest average net return across all four hybrids was planted at 38,000 seeds per acre with a total of 250 lbs. of nitrogen applied. The increase in population from 34,000 to 38,000 seeds per acre showed an average increase of 3.1 Bu./A. adding \$8.29 additional profit per acre. Applying fungicide and insecticide to the entries that received 300 lbs. of nitrogen did not increase yield.



Invisible Yield Loss Study on Corn – 2008

Planted:	April 23, 2008	Previous Crop:	Corn
Harvested:	Various	Tillage:	Disc / Chisel / Field Cultivator
Soil Type:	Ragsdale Silt Loam	Herbicide:	3 qts. Degree Xtra / 1 qt. Atrazine
Population:	32,000 seeds/A.	Insecticide:	24 oz. Durango
Rows:	Six 30" rows		6 oz. Artic

RAINFALL	
April	4.64 in.
May	6.36 in.
June	3.12 in.
July	8.90 in.
August	<u>0.80 in.</u>
Total	23.82 in.

Purpose: To harvest corn at multiple dates and moistures to evaluate the yield differences as well as net revenues of harvesting wet corn versus dry corn. The goal of this study is to see if we sustain any dry matter weight loss that could cause lower yields at lower moisture rates. Net return will be calculated considering yield of the corn, 1.4% shrink and typical drying rates.

Harvest Date	Harvest Moisture	Bushels* Per Acre	Yield Adv.	\$ Gross Revenue/A.	Commercial Drying		On-Farm Drying	
					Less Drying Cost/A. [^]	Net Revenue/A.	Less Drying Cost/A. [^]	Net Revenue/A.
BECK 5444VT3								
Sept. 13	26.8%	221.4	+33.3	\$1,107.00	\$104.50	\$1,002.50	\$55.25	\$1,054.75
Sept. 18	23.5%	194.9	+6.8	\$974.50	\$66.27	\$908.23	\$33.13	\$941.37
Sept. 24	18.8%	217.1	+29.0	\$1,085.50	\$33.00	\$1,052.50	\$16.50	\$1,069.00
Sept. 25	17.2%	215.6	+27.5	\$1,078.00	\$18.97	\$1,059.03	\$9.49	\$1,068.51
Oct. 2	15.3%	188.1	----	\$940.50	\$2.26	\$938.24	\$1.13	\$939.37
BECK 7916VT3								
Sept. 18	26.8%	231.6	+15.0	\$1,158.00	\$109.32	\$1,048.68	\$54.66	\$1,103.34
Sept. 24	21.6%	239.4	+22.8	\$1,197.00	\$63.20	\$1,133.80	\$31.60	\$1,165.40
Sept. 25	20.7%	233.4	+16.8	\$1,167.00	\$53.22	\$1,113.78	\$26.61	\$1,140.39
Oct. 2	19.6%	222.5	+5.9	\$1,112.50	\$40.94	\$1,071.56	\$20.47	\$1,092.03
Oct. 17	16.4%	216.6	----	\$1,083.00	\$12.13	\$1,070.87	\$6.06	\$1,076.94

[^]Drying cost figured at \$0.04/pt. of moisture per bushel above 15% for commercial drying and \$0.02/pt. of moisture per bushel above 15% for on-farm drying.

Summary: There was a significant yield advantage for both hybrids when harvesting at higher moistures compared to waiting for corn to field dry. This seemed to be a little more exaggerated this year due to severe lodging that occurred during the storm that followed Hurricane Ike on September 14th. Net revenues after accounting for drying and shrinkage show that the optimum harvest moisture for 5444VT3 to be 17.2% for commercial drying with charges of \$0.04/point/bushel compared to 18.8% for on-farm drying with charges of \$0.02/point/bushel. The optimum harvest moisture for 7916VT3 was 21.6% for both commercial and on-farm drying.