



## Herbicide Study on Corn – 2009

**Planted:** April 24, 2009  
**Harvested:** September 12, 2009  
**Rows:** Three 30" rows  
**Soil Type:** Ragsdale Silt Loam  
**Population:** 32,500 seeds/A.  
**Replications:** Two (averaged)

**Previous Crop:** Soybeans  
**Tillage:** Fall Chisel / Field Cultivator  
**Herbicide:** 2 qts. Atrazine  
**Insecticide:** 6 oz. Artic

RAINFALL	
April	7.0 in.
May	5.9 in.
June	4.1 in.
July	7.2 in.
August	1.4 in.
Total	25.6 in.

**Purpose:** In this study, we are comparing five common post-emergence herbicides that are being used in Beck's southern marketing area. Integrity™, a new pre-emergence product from BASF, was also added this year. All entries were sprayed near the late side of the label limit. This was done to test crop safety as the corn plant begins to determine its yield potential. All entries were kept weed free to ensure that herbicide chemistry was the yield limiting factor in this trial.

Yield Rank	Brand / Growth Stage	Harvest Population	Test <sup>†</sup> Weight	Percent Moisture	2009 Bushels <sup>†</sup> Per Acre	% of Glyphosate Control
<b>INTEGRITY™ – Pre-Emerge</b>						
1	BECK 6733HXR™*	29,834	58.5	24.9	255.3	101.4%
2	BECK 5779VT3	30,000	55.2	24.2	240.1	101.0%
3	BECK 5608VT3	30,833	57.3	22.3	231.2	112.8%
4	BECK 5716A3	<u>28,667</u>	<u>54.2</u>	<u>24.6</u>	<u>221.8</u>	<u>101.5%</u>
	AVERAGE	29,833	56.3	24.0	237.1	104.2%
<b>SURESTART™ – 11" Corn</b>						
1	BECK 6733HXR™*	31,334	58.7	23.9	259.4	103.0%
2	BECK 5779VT3	30,667	56.1	24.0	237.1	99.7%
3	BECK 5608VT3	30,500	57.1	22.4	222.1	108.3%
4	BECK 5716A3	<u>29,500</u>	<u>54.6</u>	<u>24.8</u>	<u>207.4</u>	<u>94.9%</u>
	AVERAGE	30,500	56.6	23.7	231.5	101.5%
<b>GLYPHOSATE – V6 (CONTROL)</b>						
1	BECK 6733HXR™*	31,000	57.9	24.1	251.8	
2	BECK 5779VT3	30,333	55.2	23.1	237.8	
3	BECK 5608VT3	30,500	56.8	21.6	205.0	
4	BECK 5716A3	<u>29,667</u>	<u>53.9</u>	<u>23.0</u>	<u>218.6</u>	
	AVERAGE	30,375	55.9	22.9	228.3	
<b>LAUDIS™ – V6</b>						
1	BECK 6733HXR™*	30,500	58.0	23.5	253.7	100.8%
2	BECK 5779VT3	31,500	55.5	23.4	229.3	96.4%
3	BECK 5608VT3	30,500	57.0	22.0	207.1	101.0%
4	BECK 5716A3	<u>30,000</u>	<u>53.7</u>	<u>23.7</u>	<u>222.7</u>	<u>101.9%</u>
	AVERAGE	30,625	56.1	23.1	228.2	100.0%
<b>STEADFAST® – V6</b>						
1	BECK 6733HXR™*	29,334	58.1	24.2	256.7	101.9%
2	BECK 5779VT3	30,000	56.0	23.5	227.1	95.5%
3	BECK 5608VT3	30,500	57.1	21.2	190.7	93.0%
4	BECK 5716A3	<u>29,334</u>	<u>54.9</u>	<u>23.3</u>	<u>206.4</u>	<u>94.4%</u>
	AVERAGE	29,792	56.5	23.0	220.2	96.2%
<b>CELEBRITY PLUS® – V6</b>						
1	BECK 6733HXR™*	30,500	58.1	24.2	249.7	99.2%
2	BECK 5779VT3	31,167	55.8	23.6	218.0	91.7%
3	BECK 5608VT3	30,667	56.7	21.3	211.2	103.0%
4	BECK 5716A3	<u>30,833</u>	<u>54.7</u>	<u>23.7</u>	<u>204.4</u>	<u>93.5%</u>
	AVERAGE	30,792	56.3	23.2	220.8	96.9%

<sup>†</sup>Bushels per acre and test weight corrected to 15% moisture. \*XL Brand is distributed by Beck's Superior Hybrids, Inc. Integrity™ and Celebrity Plus® are trademarks of the BASF Corporation. Laudis™ is a trademark of Bayer Crop Science. Steadfast® is a registered trademark of DuPont. SureStart™ is a trademark of Dow AgroSciences.



## Herbicide Study on Corn – Continued

**Summary:** The glyphosate treated entries were used as the control in this study due to the fact that all of the hybrids in this study carried some form of traited glyphosate resistance. Yields for all of the other entries were rated as a percentage of the control so that crop safety could be compared. The average yields for Integrity™, SureStart™, and Laudis™ entries were equal to or higher than the glyphosate control. Steadfast® and Celebrity Plus®, both Sulfonylurea herbicides, showed significantly lower yields compared to the control. The average yield loss for Steadfast® treated entries was 8.1 Bu./A. while the average yield loss for the Celebrity Plus® entries was 7.5 Bu./A. Remember that “16” family hybrids are particularly sensitive to Sulfonylurea herbicides, as seen by the 12.2 Bu./A. and 14.2 Bu./A. yields loss that 5716A3 incurred when sprayed with Steadfast and Celebrity Plus respectively.



## Invisible Yield Loss Study on Corn – 2009

**Planted:** April 24, 2009  
**Harvested:** Various  
**Soil Type:** Ragsdale Silt Loam  
**Population:** 32,000 seeds/A.  
**Rows:** Six 30” rows

**Previous Crop:** Soybeans  
**Tillage:** Fall Chisel / Field Cultivator  
**Herbicide:** 1.5 qts. Harness Xtra  
 1 qt. Atrazine  
**Insecticide:** 6 oz. Artic

RAINFALL	
April	7.0 in.
May	5.9 in.
June	4.1 in.
July	7.2 in.
August	1.4 in.
Total	25.6 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	Test <sup>†</sup> Weight	Bushels <sup>†</sup> Per Acre	Yield Adv.	\$ Gross Revenue/ A.	Commercial Drying		On-Farm Drying	
						Less Drying Cost/A. <sup>^</sup>	Net Revenue/A.	Less Drying Cost/A. <sup>^</sup>	Net Revenue/A.
<b>BECK 7916VT3</b>									
Sept. 11	25.3%	57.7	237.3	10.8	\$854.28	\$97.77	\$756.51	\$48.88	\$805.40
Sept. 18	21.7%	56.8	233.6	7.1	\$840.96	\$62.60	\$778.36	\$31.30	\$809.66
Sept. 30	20.0%	57.8	226.5	0.0	\$815.40	\$45.30	\$770.10	\$22.65	\$792.75
Oct. 12	19.8%	57.6	233.7	7.2	\$841.32	\$44.87	<b>\$796.45</b>	\$22.44	<b>\$818.88</b>
Oct. 22	17.6%	58.3	226.5	----	\$815.40	\$23.56	\$791.84	\$11.78	\$803.62

<sup>†</sup> Bushels per acre and test weight corrected to 13% moisture.

<sup>^</sup> 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 harvesting at higher moistures compared to waiting for corn to field dry, but due to the cost of drying, revenues increased as drying cost decreased. Lodging did not play a role in the yield loss in this year's study. Harvesting BECK 7916VT3 at 19.8% moisture provided the highest net revenue using both commercial and on-farm drying costs.

“We have been growing 100% Beck’s corn for 5 years and our farm averages are higher that they ever have been. The BECK 7916CBRR yield of 254 bushels per acre was phenomenal.”

Wayne, Matt & Brandon Glenn  
 Owensboro, KY

