

## 300 Bu. Corn Study - Continued

Yield Rank	Brand-Hybrid	Planted Population	Test Weight	Percent Moisture	Bushels* Per Acre	Yield Advantage vs. 30" rows @ 34,000
<b>8" TWIN ROWS + QUILT / WARRIOR</b>						
1	BECK 5616RR	38,000	56.5	19.9	227.7	
2	BECK 5616RR Poncho 1250	38,000	57.5	18.6	227.3	
3	BECK 5444RR	38,000	57.0	17.4	227.9	
4	BECK 6722RR	38,000	<u>55.0</u>	<u>21.0</u>	<u>200.0</u> <sup>^</sup>	
AVERAGE			56.5	19.2	227.6	+9.6

\*Bushels per acre corrected to 15% moisture. Plot weighed by BECK'S Hybrids – Scott Ebelhar

<sup>^</sup>6722RR experienced significant root lodging in this plot which lead to increased moisture and some inconsistency in yield.

**Summary:** Although this year's 300 bushel attempt fell short of our goal, there is interesting data concerning row spacing at high populations. At 38,000 population, the average yield decreased in 30" rows while average yield increased in 15" and 8" twin rows. BECK 5616RR showed the most yield increase when planted in 15" rows using high populations. Average yield was equal between Beck's standard FaStart™ treatment and Poncho 1250. BECK 6722RR experienced heavy root lodging due to excessive rain and wind. Lodging was greatest in twin and 30" rows at high populations. Yield increases also occurred with the use of a foliar fungicide and insecticide sprayed just prior to pollination. Special thanks to Great Plains and Tri-County Equipment for the use of their twin row planter.



## Tillage System Study - 2006

<b>Planted:</b>	April 12, 2006	<b>Previous Crop:</b>	Corn
<b>Harvested:</b>	September 4, 2006	<b>Tillage:</b>	Various
<b>Rows:</b>	Twelve 30" rows	<b>Herbicide:</b>	3 qts. Degree Xtra / 1 qt. Atrazine
<b>Soil Type:</b>	Ragsdale Silt Loam		22 oz. Roundup
<b>Population:</b>	34,000 seeds/A.	<b>Insecticide:</b>	6 oz. Artic
		<b>Product Tested:</b>	BECK 5616CBRR

RAINFALL	
April	2.5 in.
May	6.6 in.
June	2.5 in.
July	3.6 in.
August	<u>6.3 in.</u>
Total	21.5 in.

**Purpose:** There are many different tillage practices utilized throughout Beck's southern marketing area, along with many different cropping rotations. With the increase in continuous corn acres we have begun a long term study looking at how these varied tillage practices relate to yield performance in a continuous corn environment.

Tillage Method	Test Weight	Percent Moisture	Bushels* Per Acre
Fall Disk & Chisel / Spring Field Cultivator	56.0	20.5	208.6
Fall Disk & Moldboard Plow / Spring Field Cultivator	55.0	21.1	206.9
Fall Disk / Spring Field Cultivator (twice)	56.0	22.1	202.4
Fall Disk / In-line Ripper / Spring Field Cultivator	56.5	21.7	196.7
Fall Disk / Disk Ripper / Spring Field Cultivator	55.5	22.1	191.0
No-Till	55.0	25.1	189.2
Fall Disk / Spring Field Cultivator	55.0	22.7	181.7
In-line Ripper	55.0	25.0	177.2
Fall Turbo Till	<u>55.0</u>	<u>25.3</u>	<u>172.1</u>
AVERAGE	55.4	22.8	191.8

\*Bushels per acre corrected to 15% moisture. Plot weighed by BECK'S Hybrids – Scott Ebelhar.

**Summary:** As expected traditional tillage methods had superior performance after one year of data. It appears that the more residue that can be broken down in the fall, thereby reducing a source for disease along with reducing compaction, the more positive yield response we obtained. Fall disking followed by either moldboard plowing or the use of a chisel plow proved to be the most beneficial in the first year. Use of a second pass with the field cultivator or a vertical tillage tool in spring could possibly help to better warm soils prior to planting. It will be interesting to see how no-till and vertical tillage practices perform over the long term as soil structure continues to rebuild itself. There is also a growing interest in strip tillage that we will be looking at in the near future.