

BECK'S 300 Bu. Attempt – 2006

Location: 300-1, 3 & 4 S. plots Planted: April 10, 2006 Harvested: September 20, 2006 Soil Type: Genesee Silt Loam Tillage: In line Ripper / S-tine in 1 st year corn Moldboard Plot / S-tine in 2 nd year and continuous corn	Fertilizer: Fall Plowdown: 300# 6-15-40 18#N Weed & Feed: 18 gal 28-0-0 53#N Starter Mix: 8.5 gal 10-34-0 8.5 gal 28-0-0 35#N Sidedress: 65 gal 28-0-0 <u>194#N</u> 300#N Insecticide: Force on non-RW Hybrids
Herbicide: Pre: 2.1 qts. Bicep II Magnum / 1 qt. Princep Post: 1.67 qts. Lexar / 8 oz. Stinger	

Purpose: In our attempt to reach 300 bushels per acre, we have tried several different approaches in the past 26 years. In the early years, we increased our populations and applied extremely high rates of fertilizer as well as some micronutrients. In the middle years, we tried using different tillage methods like v-rip, chisel, and moldboard plow. From 1991 to 2002 we tested zone-till vs. conventional.

In 2003, we tested ultra-high populations and twin rows using conventional-till practices. In 2004, we started the next phase of research where we compare the following crop rotations: continuous corn, two-year corn/one year bean, and corn/soybean rotations. In an effort to maximize yield on each hybrid, we adjusted the planting populations based on ear type. We planted "22" series hybrids at 32,300 and planted all others at 36,000 population.

Brand-Hybrid	Planted Population	Harvested Population	Test Weight	Percent Broken Stalks	Percent Root Lodging	Percent Moisture	Bushels* Per Acre
<u>30" ROWS CONTINUOUS CORN</u>							
BECK 5444RR	36,000	32,000	55.0	1.6	0.0	24.4	258.7
BECK 6197RW	36,000	33,000	56.5	0.0	0.0	26.4	249.9
BECK 5538Hx1	36,000	35,000	56.0	0.0	0.0	24.2	246.3
BECK 5222Hx1	32,300	28,000	53.0	0.0	0.0	22.0	237.0
BECK 5816CBRR	36,000	30,000	55.5	0.0	0.0	23.6	234.9
BECK 6722CBRWRR	32,300	28,500	55.0	0.0	0.0	24.5	234.9
BECK EX 4558CBRR <small>(5416CBRWRR Gen.)</small>	36,000	26,000	57.0	0.0	0.0	20.9	228.7
BECK 5616CBRWRR	<u>36,000</u>	<u>32,500</u>	<u>55.5</u>	<u>1.4</u>	<u>0.0</u>	<u>23.0</u>	<u>218.4</u>
AVERAGE	35,075	30,625	55.4	0.4	0.0	23.6	238.6
<u>30" ROWS SECOND YEAR CORN</u>							
BECK 5444RR	36,000	31,000	55.5	0.0	1.6	24.8	279.4
BECK 6197RW	36,000	32,500	56.0	0.0	0.0	27.5	242.2
BECK 6722CBRWRR	32,300	27,500	55.5	0.0	0.0	25.6	239.7
BECK 5222Hx1	32,300	32,000	53.0	0.0	0.0	22.4	232.2
BECK EX 4558CBRR <small>(5416CBRWRR Gen.)</small>	36,000	31,000	56.0	1.6	0.0	21.7	230.0
BECK 5538Hx1	36,000	32,000	56.5	0.0	0.0	24.5	229.4
BECK 5816CBRR	36,000	33,000	56.0	0.0	0.0	23.8	227.3
BECK 5616CBRWRR	<u>36,000</u>	<u>32,000</u>	<u>55.5</u>	<u>0.0</u>	<u>0.0</u>	<u>24.3</u>	<u>225.3</u>
AVERAGE	35,075	31,375	55.5	0.2	0.2	24.3	238.2
<u>30" ROWS FIRST YEAR CORN</u>							
BECK 5538Hx1	36,000	37,000	57.0	0.0	0.0	24.2	260.8
BECK 5444RR	36,000	36,500	55.5	0.0	0.0	23.3	258.3
BECK 6197RW	36,000	32,000	55.5	0.0	0.0	26.3	252.7
BECK 6722CBRWRR	32,300	24,500	55.5	0.0	0.0	26.8	227.8
BECK 5616CBRWRR	36,000	29,500	55.5	3.4	0.0	24.0	227.4
BECK 5222Hx1	32,300	27,500	54.0	0.0	0.0	24.2	225.4
BECK 5816CBRR	36,000	32,000	55.5	4.7	0.0	23.4	223.6
BECK EX 4558CBRR <small>(5416CBRWRR Gen.)</small>	<u>36,000</u>	<u>32,500</u>	<u>56.0</u>	<u>4.6</u>	<u>0.0</u>	<u>23.2</u>	<u>210.8</u>
AVERAGE	35,075	31,438	55.6	1.6	0.0	24.4	235.9

*Bushels per acre corrected to 15% moisture.

Summary: On average, we observed no significant yield differences between any of the crop rotation methods tested for the past two years. This year's top hybrids, BECK 5444RR and BECK 6197RW performed at the top in all three environments as well. BECK 5538Hx1 genetics was also at or near the top of this high yield study for the past two years. This year's top yield of 279.4 Bu./A. was 17 Bu./A. higher than last year's top yield. Overall, this year's plot averaged 8.3 Bu./A. more than last year, and is our highest yield we have reached since our record setting yield of 308 Bu./A. in 1994.