

BECK'S 7.5" vs. 15" vs. 30" Row Spacing Study on Soybeans - 2003

Location: E1, E2 plots
Planted: April 21, 2003
Harvested: October 10, 2003
Rows: 7.5" (drilled @ 200,000)
 15" (drilled @ 175,000)
 30" (planted @ 150,000)

Previous Crop: Corn
Tillage: V-Rip / S-tine
Herbicide: Post: 22 oz. Weathermax

RAINFALL	
April	1.5 in.
May	7.7 in.
June	2.0 in.
July	10.4 in.
August	<u>5.2 in.</u>
Total	26.8 in.

Purpose: Soybean varieties can vary greatly in their structure and ability to branch. Selecting the correct variety for your soil type along with knowing how that variety responds to various populations and row spacing is critical for maximizing yield. This study compares ten different Beck's soybean varieties at 7.5", 15" and 30" row spacing.

Brand-Variety	Target Planting Population	Actual Population @ Emergence	Standability 1=Erect 5=Flat	Plant Height (in.)	Pod Height (in.)	Bu./A.*
7.5" Rows						
BECK 283RR	200,000	180,353	1.4	26	3.0	53.1
BECK 292RR	200,000	154,278	1.5	28	4.0	53.9
BECK 295NRR	200,000	160,797	1.7	29	4.0	56.1
BECK 323RR	200,000	160,797	1.5	29	4.0	55.1
BECK 336NRR	200,000	178,181	1.7	32	4.0	53.3
BECK 355RR	200,000	221,636	1.8	35	4.0	55.7
BECK 367NRR	200,000	154,278	1.7	32	4.0	52.3
BECK 375NRR	200,000	158,624	1.8	33	3.0	51.7
BECK 405NRR	200,000	173,835	1.8	30	4.0	56.6
BECK 417NRR	200,000	<u>186,872</u>	<u>1.6</u>	<u>33</u>	<u>4.0</u>	<u>56.6</u>
AVERAGE		172,965	1.7	31	3.8	54.4
15" Rows						
BECK 283RR	175,000	172,788	1.3	28	3.0	53.7
BECK 292RR	175,000	177,144	1.4	27	2.0	54.6
BECK 295NRR	175,000	171,336	1.6	32	4.0	49.9
BECK 323RR	175,000	197,472	1.6	28	3.0	58.1
BECK 336NRR	175,000	159,720	1.6	31	3.0	48.4
BECK 355RR	150,000	145,200	1.6	31	3.0	59.2
BECK 367NRR	175,000	162,624	1.7	30	3.0	56.7
BECK 375NRR	175,000	164,076	1.6	31	4.0	48.5
BECK 405NRR	150,000	136,488	1.7	29	4.0	46.9
BECK 417NRR	175,000	<u>169,884</u>	<u>1.6</u>	<u>33</u>	<u>4.0</u>	<u>59.0</u>
AVERAGE		165,673	1.6	30	3.3	53.5
30" Rows						
BECK 283RR	150,000	141,570	1.4	28	3.0	51.6
BECK 292RR	150,000	129,228	1.6	28	3.0	53.6
BECK 295NRR	150,000	153,186	1.5	31	4.0	51.4
BECK 323RR	150,000	149,556	1.5	29	3.0	59.0
BECK 336NRR	150,000	147,378	1.6	28	2.0	51.5
BECK 355RR	150,000	147,378	1.6	29	4.0	59.4
BECK 367NRR	150,000	148,104	1.5	26	2.0	57.7
BECK 375NRR	150,000	140,118	1.7	28	3.0	54.6
BECK 405NRR	150,000	145,200	1.7	31	4.0	49.8
BECK 417NRR	150,000	<u>128,502</u>	<u>1.5</u>	<u>28</u>	<u>2.0</u>	<u>54.0</u>
AVERAGE		143,022	1.6	29	3.0	54.3

*Bushels per acre corrected to 13% moisture.

BECK'S 7.5" vs. 15" vs. 30" Row Spacing Study on Soybeans (continued) – 2003

Summary: Yield differences between all widths varied by only 0.9 bushels per acre in 2003. Our six year average shows 1.6 bushels per acre difference between all row spacings, with slightly higher yields in 7.5" and 15" rows compared to 30" row spacing.

	FIVE YEAR AVERAGE*		
	7.5"	15"	30"
1997	61.0	62.3	58.2
1998	63.6	62.8	64.0
1999	47.3	44.7	48.5
2001	66.7	64.3	59.5
2002	62.4	65.8	60.9
2003	54.4	53.5	54.3
Average	59.2	58.9	57.6

*Different varieties used each year.
Bold entries indicate highest yield each year.

BECK'S Twin Row vs. 30" Row Soybean Study - 2003

Location: 300-1S plot
Planted: April 28-29, 2003
Harvested: October 20, 2003
Rows: Four 30" rows
 Four Twin rows (8 total)

Seeding Rate: 30" @ 145,000 seeds/A.
 Twin @ 175,000 seeds/A.
Previous Crop: Corn
Tillage: S-tine
Herbicide: Post: Roundup WeatherMax

RAINFALL	
April	1.5 in.
May	7.7 in.
June	2.0 in.
July	10.4 in.
August	<u>5.2 in.</u>
Total	26.8 in.

Purpose: After planting our twin row corn plots, we decided to continue the concept with our soybean research. In this plot we compare twin rows to 30" rows.

Yield Rank	Brand-Variety	Population	Plant Height (IN.)	Pod Height (IN.)	Standability 1 = Erect 5 = Flat	Bushels* Per Acre
Twin Rows						
1	BECK 323RR	167,706	33	3.0	1.5	55.2
2	BECK 283RR	174,966	30	2.0	1.4	52.6
3	BECK 417NRR	172,788	37	3.0	1.7	51.2
4	BECK 375NRR	<u>177,144</u>	<u>40</u>	<u>3.0</u>	<u>1.7</u>	<u>50.6</u>
	AVERAGE	173,151	35	2.8	1.6	52.4
30" Rows						
1	BECK 283RR	148,830	30	2.0	1.4	53.2
2	BECK 375NRR	141,570	36	4.0	1.6	52.8
3	BECK 323RR	143,022	34	3.0	1.4	52.4
4	BECK 417NRR	<u>135,036</u>	<u>32</u>	<u>3.0</u>	<u>1.5</u>	<u>44.5</u>
	AVERAGE	142,115	33	3.0	1.5	50.7

Summary: We found a slight advantage of 1.7 bushels per acre for the twin rows compared to 30" rows. On average the 30" rows also had 31,000 less plants per acre. These results are similar to the yield and population differences we see between 30" rows and 7.5" or 15" rows. See Beck's Row Spacing Study results above.

*Bushels per acre corrected to 13% moisture.

