



100 Bushel Soybean Study – 2009

Planted: May 25, 2009 **Previous Crop:** Corn
Harvested: Oct. 20, 2009 **Tillage:** Chisel / Field Cultivator (twice)
Rows: Eleven 15" rows **Herbicide:** Early Post: 32 oz. Credit Extra
Seeding Rate: Various Post: 32 oz. Credit Extra
Replications: Two (averaged) **Product Tested:** BECK 362NR™*

RAINFALL	
April	10.0 in.
May	4.9 in.
June	4.6 in.
July	4.0 in.
August	3.6 in.
Total	27.1 in.

Purpose: This is our second attempt at 100 bushel soybeans at the Illinois PFR Center. The base treatment (the CONTROL) in this study is Beck 362NR™* with fungicide and insecticide seed treatments, Protinus™ and Optimize®. All the treatments were planted at a planting population of 160,000 seeds/A., however two additional planting populations of 200,000 and 225,000 were also evaluated. A foliar treatment of a fungicide application was also made at the R3 growth stage.

Cobra® herbicide was used in this study at the R1 growth stage in the attempt to shorten internode length. Sugar treatments were used to add a carbohydrate food source to the soybeans and to help offset the damaging defoliation of the Cobra herbicide. Both Sable and Coron™ were used as foliar nitrogen treatments. Invinsa was used as an ethylene management enhancing product.

Population Test

Average Emerged Population	Additional Treatment	Average Bushels Per Acre†
160,000	6 oz./A. Headline (CONTROL)	72.8
200,000	6 oz./A. Headline	72.5
225,000	6 oz./A. Headline	71.8

Foliar Application Test

Foliar Treatments	Growth Stage	Yield†	+/- Control	% Yield Increase
2# Sugar + Headline	R1,R3	73.9	+1.1	1.5
8 oz Cobra + Headline	R1,R3	74.7	+1.9	2.6
8 oz Cobra + 2# Sugar +Headline	R1,R3	77.5	+4.6	6.4
Invinsa	R3	75.8	+3.0	4.1
2 Gal. Sable + Headline	R4,R3	72.7	- 0.1	-0.1
2 Gal. Coron + Headline	R4,R3	72.9	+0.1	0.1

†Bushels per acre corrected to 13% moisture. *XL Brand is distributed by Beck's Superior Hybrids, Inc.



Figure 1



100 Bushel Soybean Study – Continued

Summary: All entries in this 100 bushel attempt averaged 73.8 Bu./A., falling significantly short of our goal. However, these are excellent yields and BECK 362NR™* performed very well. Planting populations of 160,000 seeds/A. provided the highest yield and increasing populations over this level did not increase yield.

Cobra herbicide (lactofen) provided a 1.9 Bu./A. yield increase by shortening internodes and plant height. Adding glucose or a carbohydrate food source with sugar along with the Cobra, increased yields even higher to 4.6 Bu./A. It was very noticeable that the sugar application caused less plant injury and defoliation when added to the Cobra herbicide (See Figure 1).

Both Sable and Coron foliar nitrogen treatments did not offer yield benefits. Applications were made later at the R4 growth stage and this may have been too late for these products.

Invinsa was used as an ethylene management tool and increased yields by 3.0 Bu./A. or 4.1%.



Soybean Max Grow Study – 2009

Planted: May 28, 2009
Harvested: October 13, 2009
Rows: Four 30" rows
Seeding Rate: 165,000 seeds/A.

Previous Crop: Corn
Tillage: Chisel / Field Cultivator
Herbicide: 32 oz. Glyphos Extra
Product Tested: BECK 342NR

RAINFALL	
April	10.0 in.
May	4.9 in.
June	4.6 in.
July	4.0 in.
August	3.6 in.
Total	27.1 in.

Purpose: To evaluate a foliar feed fertilizer/PGR product called Max Grow manufactured by NCA Biotech Inc. Max Grow is a plant growth regulator that stimulates the rooting system and increases pod set in soybeans. Max Grow also contains a blend of 8.5-0.0-1.6 with Mo, Mn, B, S, and Fe.

Treatment	Bushels Per Acre [†]	Net Return [^]
None (control)	63.8	\$609.30
Max Grow	64.9	\$619.80
Difference	+1.1	\$10.50

[†]Bushels per acre corrected to 13% moisture.

[^]Soybean price used is \$9.55/Bu.

Summary: Soybean Max Grow increased yields by an average of 1.1 Bu./A. This product is not available for commercial sales yet and pricing has not been determined. More research needs to be done on this product to determine any yield enhancing abilities.

“BECK 274NR has been a terrific, as well as our favorite, soybean variety on our farm. Last year we reached 73 bushels per acre and we were very happy with the performance. The quality and the seed treatment on Beck’s soybeans, sets them apart from their competition.”

Roger Greeson
 Kokomo, IN

