

BECK'S In-Furrow Product Study - 2014

PLANTED:	May 10, 2014	PREVIOUS CROP:	Soybeans
HARVESTED:	October 11, 2014	TILLAGE:	No-Till
POPULATION:	34,000 seeds/A.	HERBICIDE:	Burndown: 1 oz. Sharpen®, 22 oz. Roundup PowerMAX®
ROWS:	Four 30" Rows	Pre:	1 qt. Princep® 4L, 2.3 qt. Bicep II Magnum®
REPLICATIONS:	Two (averaged)	Post:	1.7 qt. Lexar®, 1 qt. Roundup PowerMAX
		INSECTICIDE:	Escalate™

PURPOSE:

This study was set up to evaluate various fertilizer, nutrient and biological type products applied in-furrow at planting. All applications were applied with the Flo-Rite™ seed firmer through the in-furrow liquid fertilizer system.

Start Right is a proprietary formulation of major and micronutrients sequestered in concentrated organic acids. It is fortified with proprietary plant extracts, enzymes and select soil bacteria. It is for use on all crops at planting or early sidedressing.

GantecPro™ is a high performance product line that includes natural fertilizers, soil conditioners, and foliar adjuvants. The blend of plant-based extracts delivers a unique spectrum of bio-actives, resulting in higher yields and better growth in field crops, vegetables, and transplants. The concentrated formula requires very low application rates, making the benefits of GantecPro products easily accessible. GantecPro adjuvants improve the efficacy of fertilizers and chemicals, and allow for better results at lower rates.

TJ Challenge 2050™ (1-10-0) is a co-packaged, two component system consisting of a liquid nutrient component and a liquid microbial/mycorrhizae additive. Challenge 2050 is designed to increase root growth, and the mycorrhizal hyphae are known to become an extension of the root.

Brand & Treatment	Percent Moisture	Bushels [†] Per Acre	Bu./A. Difference	Net [‡] Return	Return on [§] Investment
BECK 5509A3					
Control	24.7	237.6	—	\$986.04	—
1 qt. Start Right	24.5	247.0	+9.4	\$1,014.55	+\$28.51
4 oz. GantecPro	23.7	242.4	+4.8	\$992.65	+\$6.61
1 qt. TJ Challenge 2050	<u>24.9</u>	<u>238.7</u>	<u>+1.1</u>	<u>\$971.11</u>	<u>-\$14.93</u>
AVERAGE	24.5	241.4	+5.1	\$994.98	+\$6.73
BECK 6175AMX™*					
Control	24.3	249.3	—	\$1,034.60	—
1 qt. Start Right	24.1	253.4	+4.1	\$1,041.11	+\$6.51
4 oz. GantecPro	24.6	253.4	+4.1	\$1,038.30	+\$3.70
1 qt. TJ Challenge 2050	<u>24.2</u>	<u>252.2</u>	<u>+2.9</u>	<u>\$1,027.13</u>	<u>-\$7.47</u>
AVERAGE	24.3	252.1	+3.7	\$1,039.63	+\$0.91
TREATMENT SUMMARY					
Control	24.5	243.5	—	\$1,010.32	—
1 qt. Start Right	24.3	250.2	+6.8	\$1,027.83	+\$17.51
4 oz. GantecPro	24.2	247.9	+4.5	\$1,015.48	+\$5.16
1 qt. TJ Challenge 2050	<u>24.6</u>	<u>245.5</u>	<u>+2.0</u>	<u>\$999.12</u>	<u>-\$11.20</u>
AVERAGE	24.4	246.8	+4.4	\$1,013.19	+\$3.82

*XL brand seed is distributed by Beck's Superior Hybrids, Inc. XL® is a registered trademark of Pioneer.

[†]Bu./A. corrected to 15% moisture. [‡]Net return is gross income (Bu./A. x \$4.15/Bu.) minus treatment cost. [§]Return on investment is Bu./A. difference x \$4.15/Bu. minus treatment cost and application cost, if applicable. \$78.00/gal. TJ Challenge 2050, \$426.00/gal. GantecPro and \$42.00/gal. Start Right.

SUMMARY:

This year's results showed a positive yield gain and return on investment for all but one product tested. This is the third year for evaluating Start Right but the first attempt with placing it in-furrow. Every year, in every replication, regardless of placement, we have achieved a yield boost and a positive return on investment from the use of Start Right. GantecPro also showed promise with a positive yield gain and return on investment, in its first year evaluation. Last year, we tested TJ Challenge 2050 in a sidedress application at V4 and received a 1.8 Bu./A. yield boost. This year, we used it in-furrow (it is recommended to use this product at planting) and saw a 2 Bu./A. average yield boost but it wasn't enough to result in a positive return on investment. Two of the three products received a higher yield response when tested on BECK 5509A3 compared to BECK 6175AMX™*. Overall, we were able to increase yields above the untreated control by an average 4.4 Bu./A. with an \$3.82/A. return on investment with our selection of products.