



Tailored Solutions – Soybean Systems Management

Trial Objective

- Historically, soybeans have not been managed as intensively as corn, possibly resulting in sub-optimal yields and economic losses. Achieving higher yields in soybeans may require the dedication of resources, ranging from seed selection to pest management to fertility management.
- Such decisions should ultimately lead to improved yields and profitability to be sustainable. However, investing more inputs in soybean production in the current market situation is not appealing to most growers.
- The objective of this trial was to determine the economic value of two production systems:
 - Grower standard system
 - Premium system (high inputs)

Research Site Details

Location	Soil Type	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield (bu/acre)	Planting Rate (seeds/acre)
Huxley, IA	Clay loam	Corn	Strip tillage	5/13/19	10/18/19	60	125K, 150K

- Three soybean varieties with different maturity groups (MGs) were used for this trial. The varieties selected had a varied Relative Maturity (RM) spread for the location in order to help understand input response:
 - 2.0 MG (early variety for the research location)
 - 2.5 MG (mid-season variety for the research location)
 - 2.9 MG (full-season variety for the research location)
- Each soybean variety was planted at both the premium and grower standard systems.
- Grower Standard
 - 150,000 seeds/acre seeding rate
 - Seeds were treated with the Acceleron® Seed Applied Solutions STANDARD fungicide and insecticide treatments.
- Premium
 - 125,000 seeds/acre seeding rate
 - Seeds were treated with the Acceleron® Seed Applied Solutions STANDARD fungicide and insecticide treatments.
 - ILeVO® seed treatment
 - Foliar fungicide and insecticide application at R3
- The trial was carried out in 30-inch row spacing, 6 rows/treatment with 3 replications.
- Tillage and weed management were the same in both systems.



Tailored Solutions – Soybean Systems Management

Table 1. Inputs and costs associated with the two production systems				
Treatment	Input	2.0 MG Cost (\$/acre)	2.5 MG Cost (\$/acre)	2.9 MG Cost (\$/acre)
Grower Standard	Seed	63.0	63.0	61.2
	Seed Treatment	7.0	7.0	7.0
	Total	70.0	70.0	68.2
Premium	Seed	52.5	52.5	51.0
	Seed Treatment	7.0	7.0	7.0
	lLeVo®	12.0	12.0	12.0
	Fungicide + Insecticide	22.0	22.0	22.0
	Total	93.5	93.5	92.0

Delaro® 325 SC fungicide was the fungicide used and Mustang® Maxx was the insecticide used.

Understanding the Results

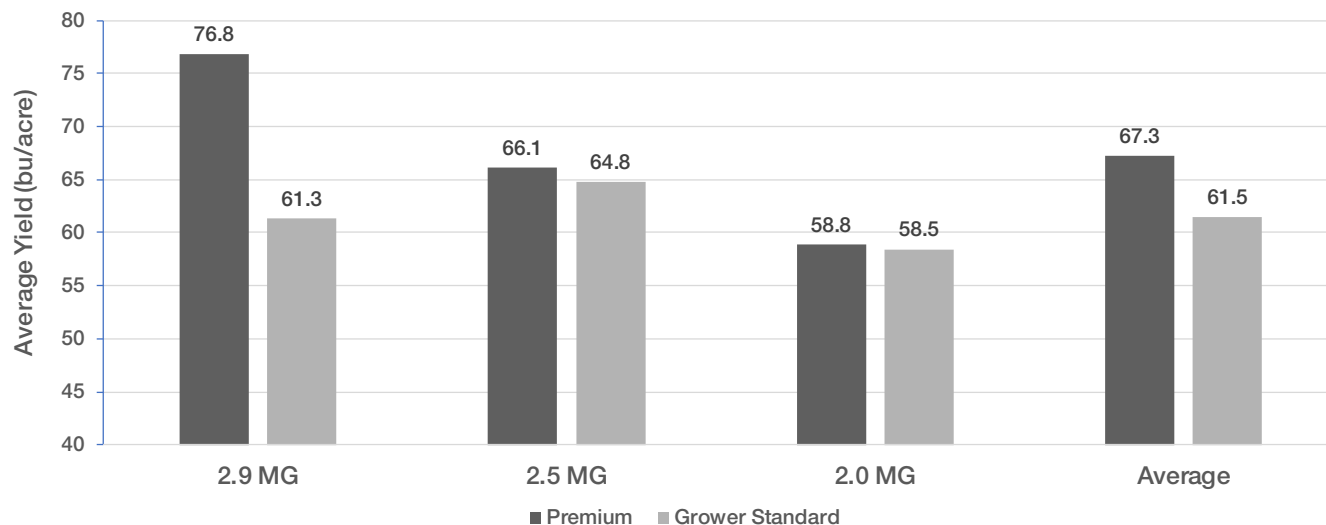


Figure 1. Yield response of three soybean varieties to two different production systems. Average represents the average yield of the three varieties for the production system.

- The premium system out-yielded the grower standard, producing an average of approximately 6 bu/acre more yield across all three soybean varieties.
- The full-season variety (2.9 MG) performed better than the other varieties in the premium system.
- With the current grain price of \$8.43/bu, about 3 bu/acre is required to pay for the extra inputs of the premium system in all three varieties.

Key Learnings

- Crop yield response to production inputs can be highly variable, often impacted by the environmental conditions during the growing season. Farmers are therefore advised to consult their trusted crop advisors when making such decisions.



Tailored Solutions – Soybean Systems Management

Legal Statements

The information discussed in this report is from a single site, replicated demonstration. This informational piece is designed to report the results of this demonstration and is not intended to infer any confirmed trends. Please use this information accordingly.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Performance may vary, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

Acceleron® and Delaro® are registered trademarks of Bayer Group. IlEVO® is a trademark of BASF Corporation. All other trademarks are the property of their respective owners. For additional product information call toll-free 1-866-99-BAYER (1-866-992-2937) or visit our website at www.BayerCropScience.us. Bayer CropScience LP, 800 North Lindbergh Boulevard, St. Louis, MO 63167. ©2019 Bayer Group. All rights reserved. 1018_R1

