



Response of 4 Asgrow[®] Brand Soybean Products to Common Planting Errors

2016 Learning Center Demo Report
Monsanto Learning Center at Scott, MS



BACKGROUND

- Growers often express concern about planting mistakes that they have made.
 - Mechanical failures may not be apparent until seedlings emerge.
- This study will aid decision making when considering replanting soybean fields.
- This study also provides more yield results from new Roundup Ready 2 Xtend[®] soybean products for midsouth production systems.



STUDY GUIDELINES

- A soybean demonstration trial was conducted in cooperation with Mississippi State at the Monsanto Learning Center near Scott, MS to determine:
 - Yield response in soybean stands with missing rows and either one or two unplanted twins in an individual row.
 - How well soybean plants compensate for missing rows.
 - When replanting or filling in, a missing part of the stand should be considered.

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STUDY GUIDELINES

- 4 Asgrow® Brands were used.
 - AG42X6
 - AG47X6
 - AG49X6
 - AG54X6
- Trial was planted on May 6, 2016 and harvested on September 10, 2016.
- All field work was completed per local standard

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STUDY GUIDELINES

- 4 treatments were included:
 - 4-row check plot planted at 150,000 plants/acre
 - 4-row plot with one row missing (Figure 1)
 - Peas planted in the missing row and killed out after emergence
 - Planting population of 112,500 plants/acre
 - 4-row plot with one missing twin of the eight in a 4-row pass
 - Peas planted in the missing row and killed out after emergence
 - Planting population of 131,250 plants/acre
 - 4-row plot with two separated twins in the pass (Figure 2)
 - Peas planted in the missing rows and killed out after emergence
 - Planting population of 112,500 plants/acre.

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RESULTS & DISCUSSION



Figure 1. Treatment with one row missing.

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RESULTS & DISCUSSION



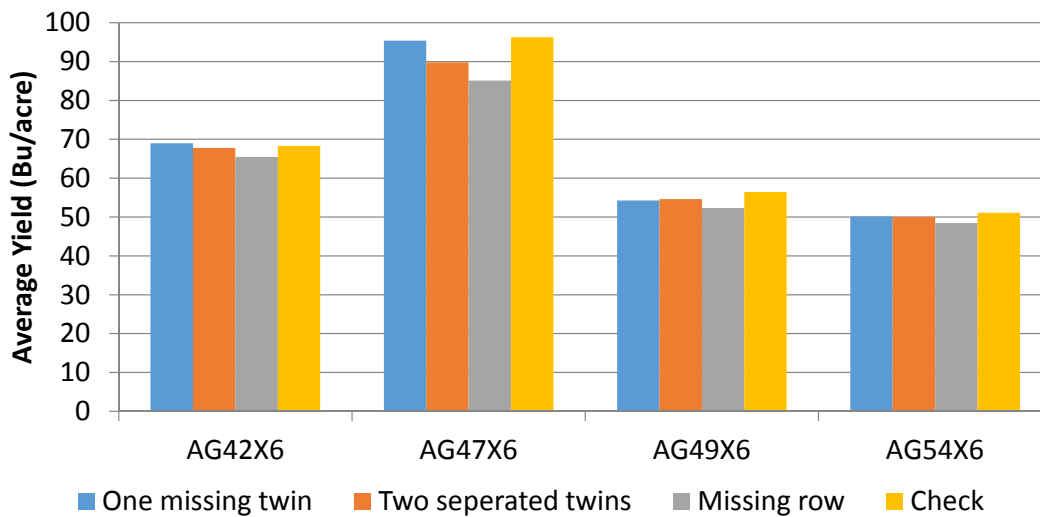
Figure 2. Treatment with missing pair of twin rows.

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RESULTS & DISCUSSION

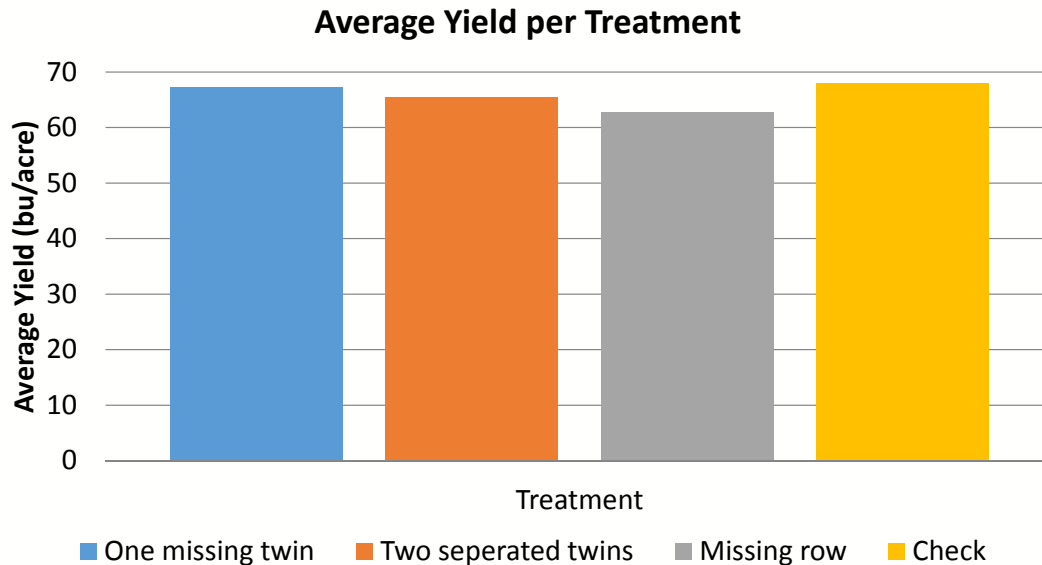
Yield Response of Asgrow® Brands to Treatments



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RESULTS & DISCUSSION



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TAKE AWAYS

- The Roundup Ready 2 Xtend® soybean products used demonstrated excellent yield potential (Table 1).
- In the environment tested, the data from this demonstration indicates that soybean plants have a tremendous ability to compensate for reduced populations and little effect was observed from the missing rows (Table 2).
- The treatment with the entire missing row had numerically lower yields than other treatments (Table 2).

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TAKE AWAYS

- Results from this demonstration study indicated that many fields with these issues can be kept rather than replanted.
- Reductions in population did not greatly impact yield in a negative way.
- Weed control in unplanted areas would be important to consider. Growers may need to invest in a more aggressive residual weed management program to keep skips clean.

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LEGAL STATEMENTS

The information discussed in this report is from a multiple site, single year, non-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 DIRECTIONS FOR USE ON PESTICIDE LABELING. IT IS A VIOLATION OF FEDERAL AND STATE LAW to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with **Roundup Ready 2 Xtend® soybeans**. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USES AND APPROVED FOR SUCH USE IN THE STATE OF APPLICATION. May not be approved in all states. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with Roundup Ready 2 Xtend® soybeans.

Roundup Ready 2 Xtend® soybeans contains genes that confer tolerance to glyphosate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Contact your Monsanto dealer or refer to Monsanto's Technology Use Guide for recommended weed control programs.

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For more information regarding the intellectual property protection for the seed products identified in this publication, please see www.asgrowanddekalb.com.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

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