# 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.



## 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.



## RESULTS & DISCUSSION

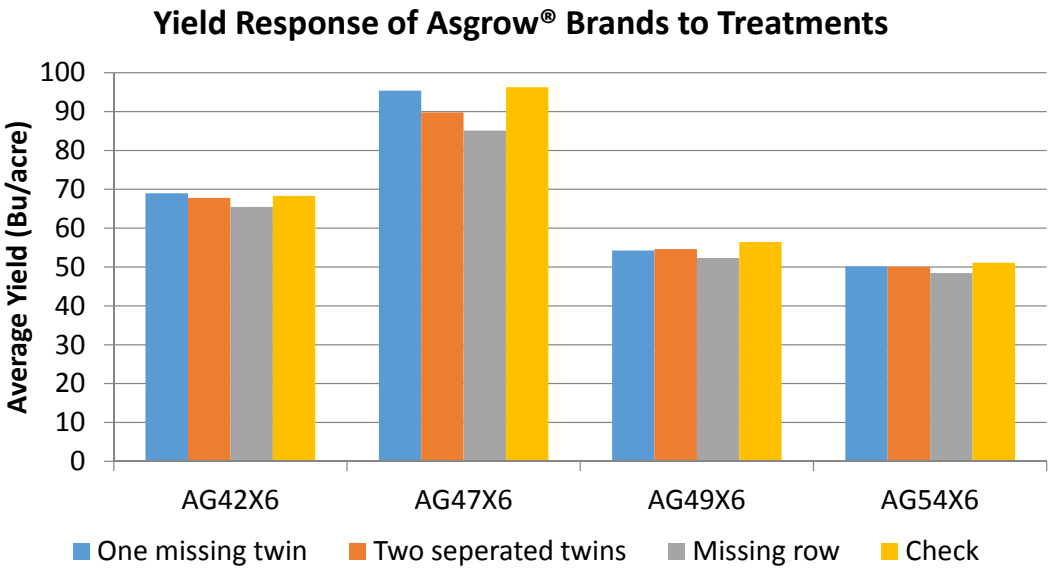
Figure 1. Treatment with one row missing.

## RESULTS & DISCUSSION

Figure 2. Treatment with missing pair of twin rows.



## RESULTS & DISCUSSION



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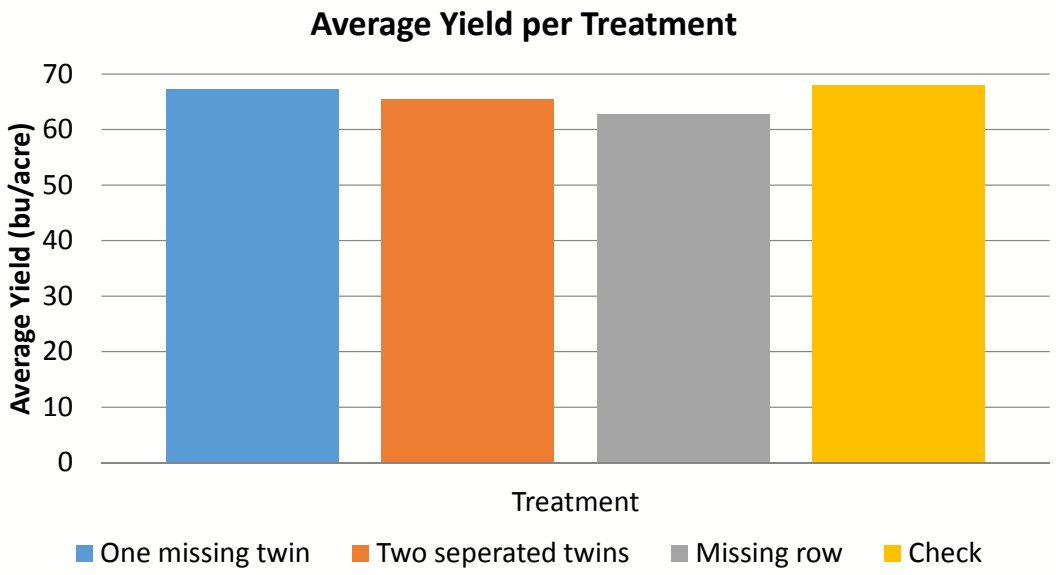


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## TAKE AWAYS

- 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.



# 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.*