

RESPONSE OF ASGROW® AG46X26 BRAND TO SKIPPY STANDS IN TWIN-ROW AND SINGLE-ROW PLANTINGS

TRIAL OVERVIEW

- Previous learning center demonstrations have indicated that soybeans have the ability to compensate yields in response to a wide variety of issues that occur in the field.
- Twin-row plantings have increased in the midsouthern planting system, resulting in questions about the effects of skippy stands that sometimes occur in fields.
- This demonstration was designed as a follow-up to previous work done with twin-row plantings with additional data and incorporating into the data a set of treatments planted in single rows.



Figure 1. Examples of random skips in two plant populations in 38-inch twin rows (2016).



Figure 2. Using predetermined data from a "Skipulator," planters were programmed to randomly insert skips into each planting population.

RESEARCH OBJECTIVE

- Evaluate the yield compensation ability of soybeans planted in single- and twin-row systems, at a variety of populations, and with several skippy stand configurations.

Location	Soil	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield/Acre	Planting Rate/Acre
Scott, MS	Clay Loam	Soybeans	Conventional	05/10/2017	10/20/2017	60-70 bu/acre	Various

SITE NOTES:

- This demonstration included treatments with planting rates ranging from 60,000 to 150,000 seeds planted/acre.
- Single rows were on a 38-inch row spacing and were planted using conventional single-row planters.
- Twin rows were planted on beds using Monosem planters on 38-inch rows with 7.5 inches between twin rows.
- Plots were 6 rows x 175 feet long or approximately .1 acre/plot.
- Skips were introduced into the planted plots by blocking holes in planter plates prior to planting. This was done using the "Skipulator" spreadsheet which is an original Monsanto Learning Center at Scott, MS idea.
- Treatment List:
 - 60,000 seeds with 12-inch skip
 - 60,000 seeds with 24-inch skip
 - 60,000 seeds with 36-inch skip
 - 60,000 seeds, solid
 - 90,000 seeds with 12-inch skip
 - 90,000 seeds with 24-inch skip
 - 90,000 seeds, solid
 - 120,000 seeds with 12-inch skip
 - 120,000 seeds, solid
 - 150,000 seeds with 1-inch skip
 - 150,000 seeds, solid

UNDERSTANDING THE RESULTS

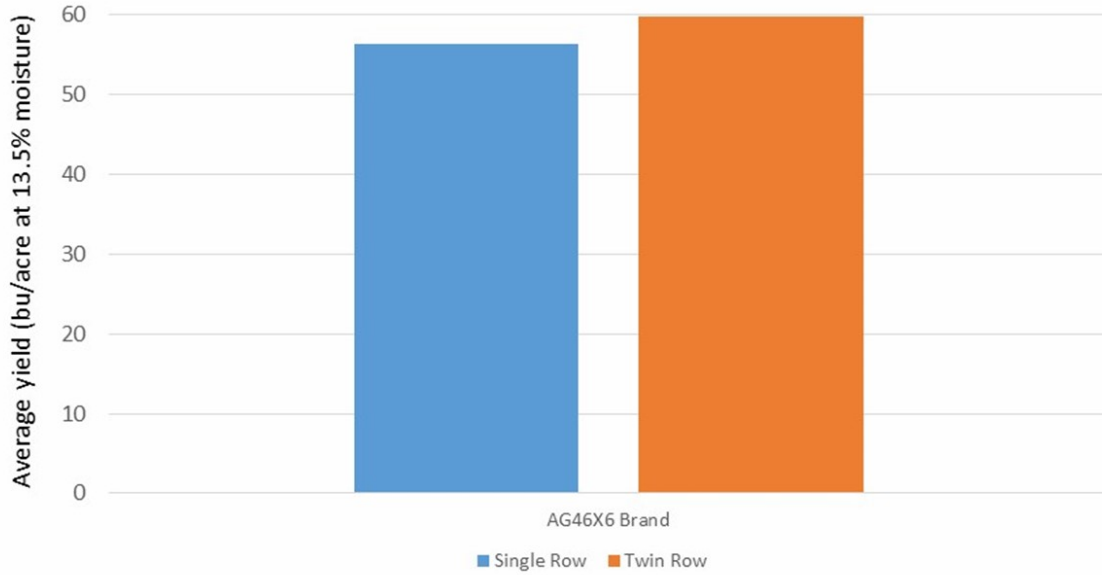


Figure 3. Response of Asgrow® AG46X6 brand to skippy stands at Scott, MS.

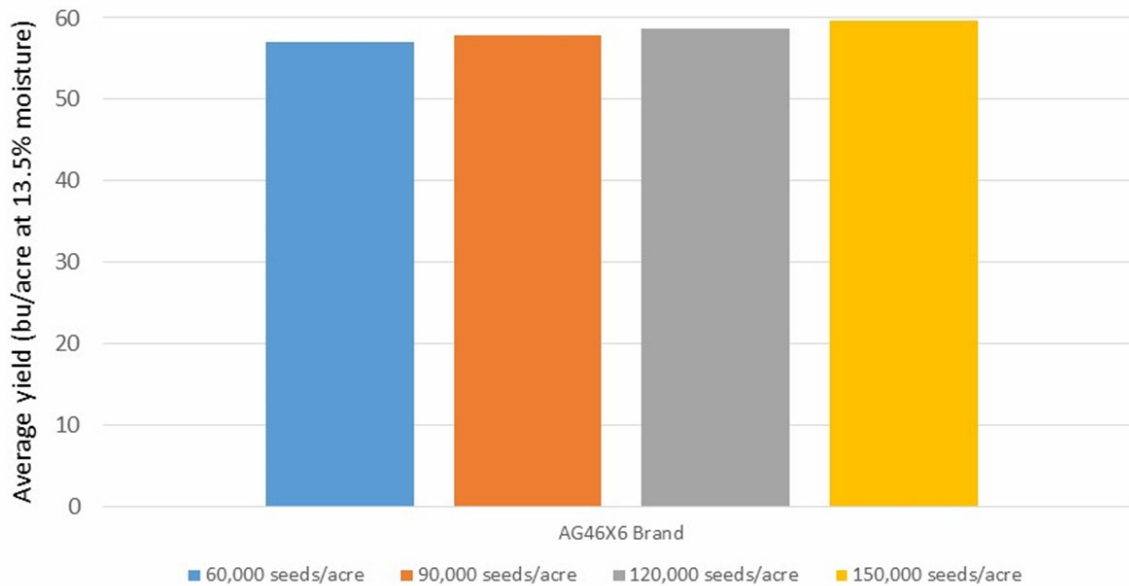


Figure 4. Response of Asgrow® AG46X6 brand to skippy stands at Scott, MS.

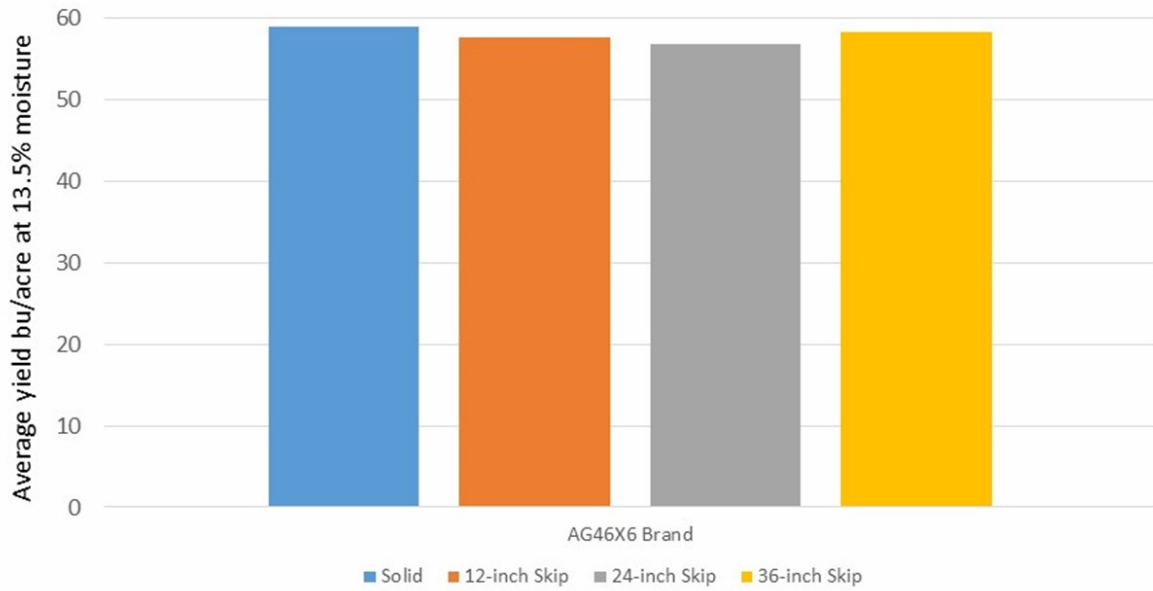


Figure 5. Response of Asgrow® AG46X6 brand to skippy stands at Scott, MS.

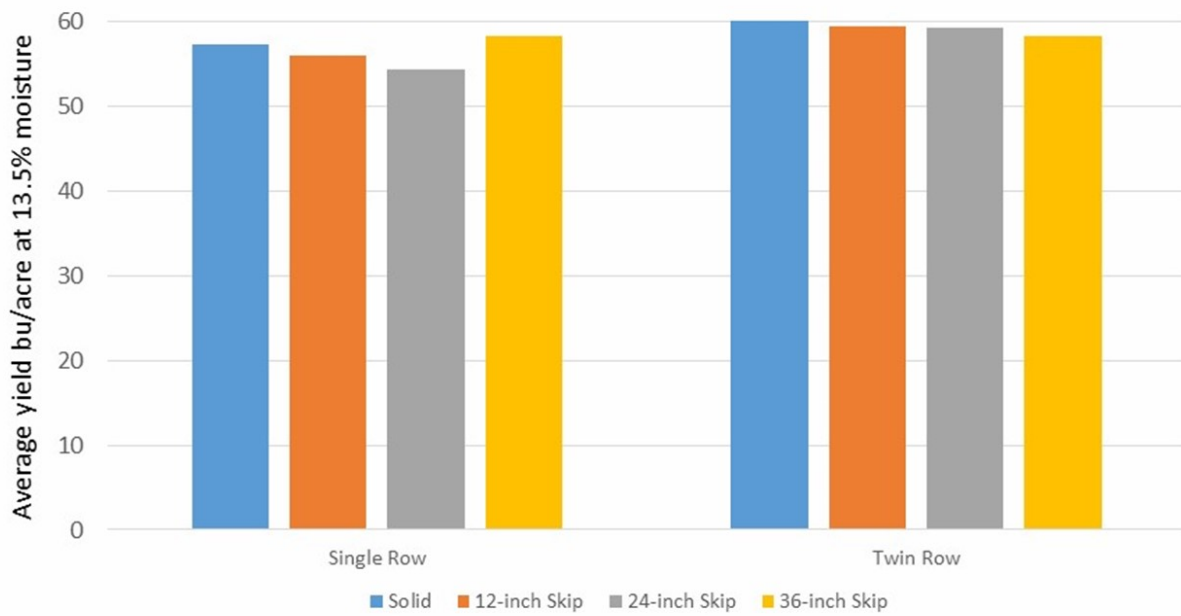


Figure 6. Response of Asgrow® AG46X6 brand to skippy stands at Scott, MS.

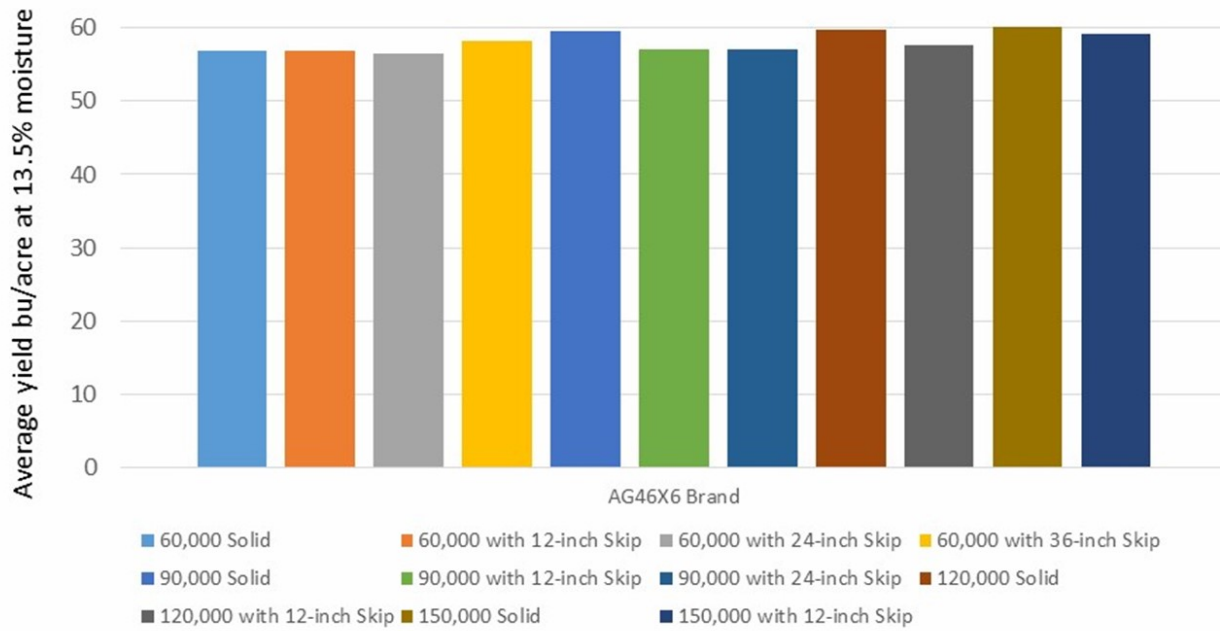


Figure 7. Response of Asgrow® AG46X6 brand to skippy stands at Scott, MS.

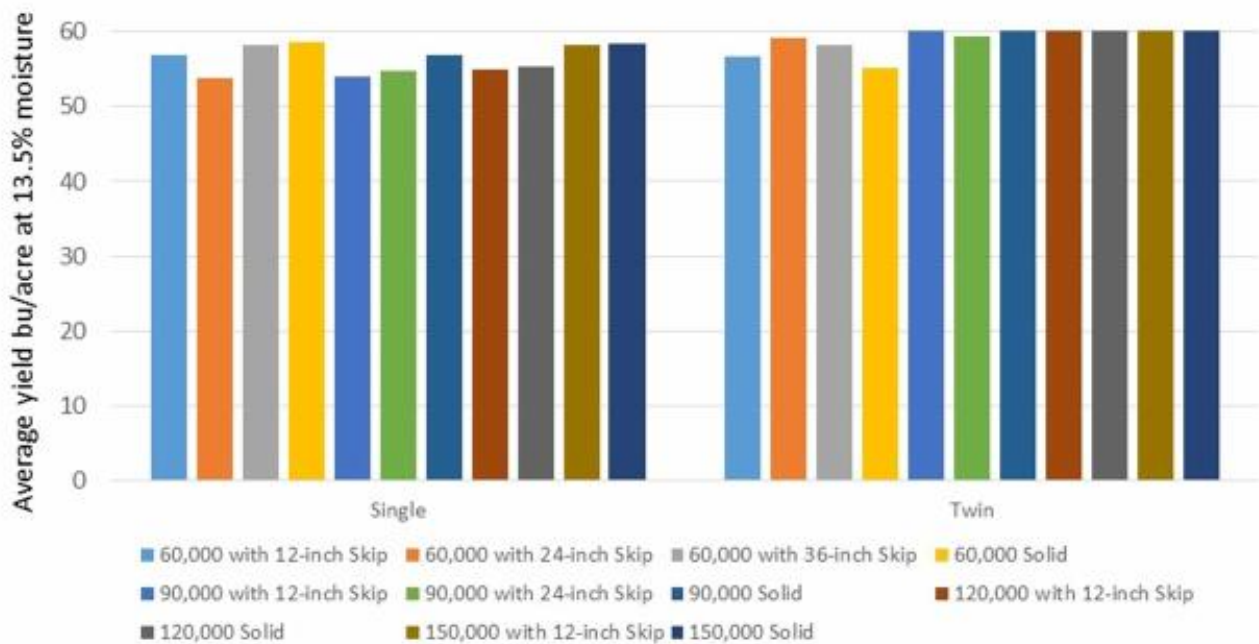


Figure 8. Response of Asgrow® AG46X6 brand to skippy stands at Scott, MS.

- As previous results have indicated, the twin-row system showed a 3 bu/acre advantage vs. the single row.
- Little yield response was observed from planting population.
- No response was observed to any skip treatment in the field.
- Results seemed to be similar in both single- and twin-row plantings.



WHAT DOES THIS MEAN FOR YOUR FARM?

- These results DO NOT recommending planting at low populations. If populations are reduced and somewhat uniformly distributed, soybeans have the ability to compensate and maintain acceptable yield potential.
- This agrees with previous data showing tremendous compensation ability in soybean crops.
- Evaluate each field and situation individually.
- In many cases replanting is not necessary. Less-than-perfect soybean stands can be kept with reasonable expectation of yield potential.
- Contact your local Asgrow® representative for more information.

LEGAL STATEMENT

For additional agronomic information, please contact your local brand representative.

Developed in partnership with Technology, Development & Agronomy by Monsanto. The information discussed in this report is from a single site, 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.

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