

Response of Three Asgrow[®] Brand Soybean Products to Stand Variability and Population

2014 Learning Center Demo Report Monsanto Learning Center at Scott, MS



Technology

Study Guidelines



- A demonstration trial was conducted at the Monsanto Learning Center at Scott, MS to evaluate the response of three Asgrow[®] brand soybean products to stand variability and population.
- The demonstration was designed to answer farmer questions, including:
 - When should farmers be concerned about "skippy" soybean stands?
 - How well do soybeans compensate for weak stands?
 - How do soybeans respond to variations in population?
 - Three Asgrow[®] soybean product brands (AG4632, AG4934, and AG5532), ranging from 4.6 RM to 5.3 RM respectively, were planted on April 1, 2014 in 30-inch twin rows (7.5 inches apart on 38-inch beds).

Study Guidelines



- Each soybean product was planted at four populations:
 - 60,000 seeds/acre
 - 90,000 seeds/acre
 - 120,000 seeds/acre
 - 150,000 seeds/acre
- Random skips of 12 inches, 24 inches, and 36 inches were randomly inserted across each of the four plant populations.
- Standard agronomic practices for the area were implemented with irrigation provided as needed.
- Demonstration plots were harvested on September 1, 2014.





Figure 1. Using predetermined data from a 'skipulator', planters were programmed to randomly insert skips into each planting population.





Figure 2. Examples of random skips in two plant populations in 38-inch twin rows.



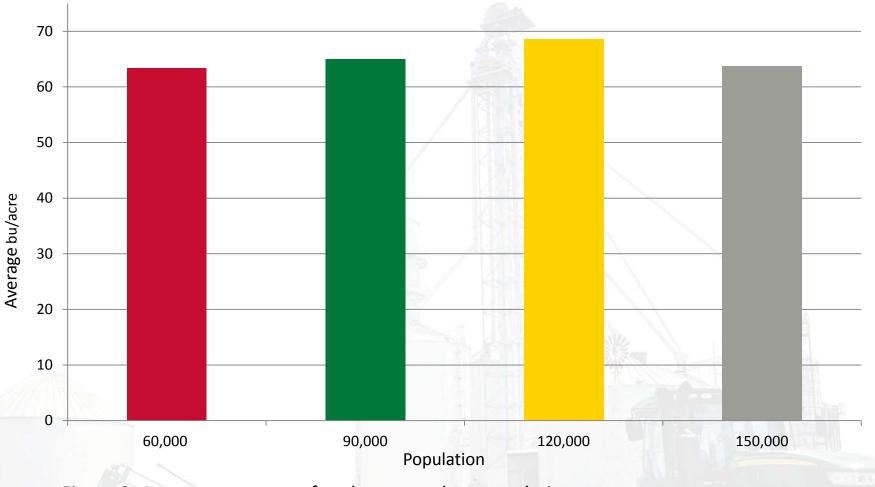


Figure 3. Average response of soybeans to plant population.



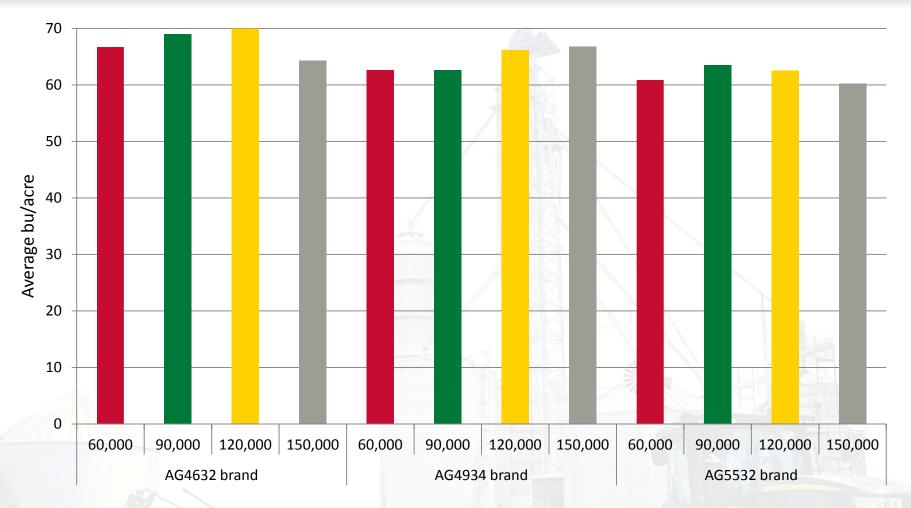
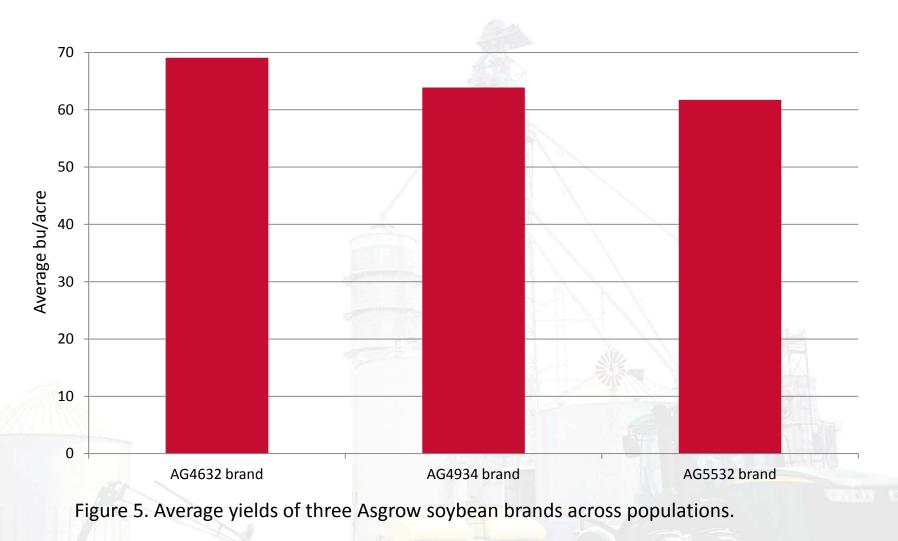


Figure 4. Average response of three soybean products to population.







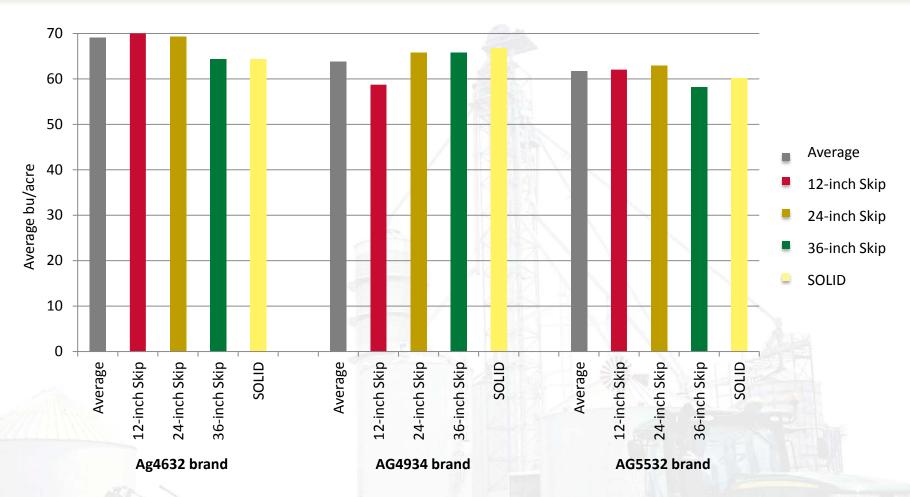


Figure 6. Average yields of three Asgrow[®] brand soybean products by stand variability.



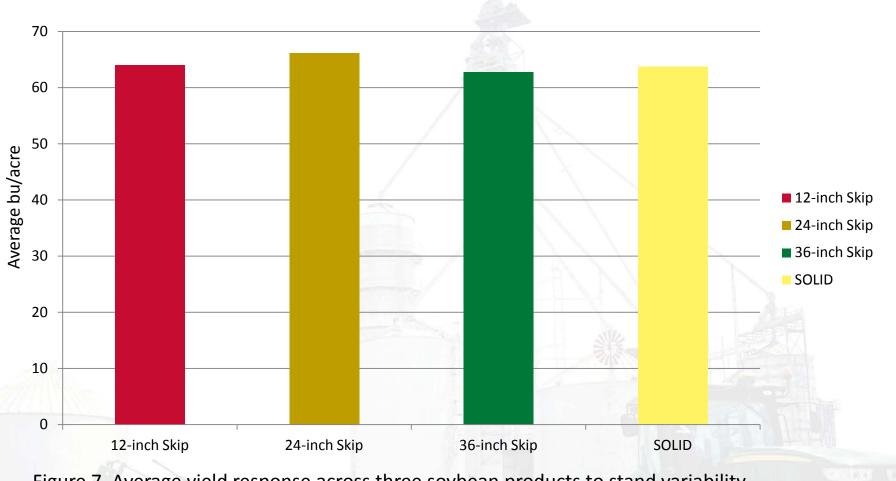


Figure 7. Average yield response across three soybean products to stand variability.



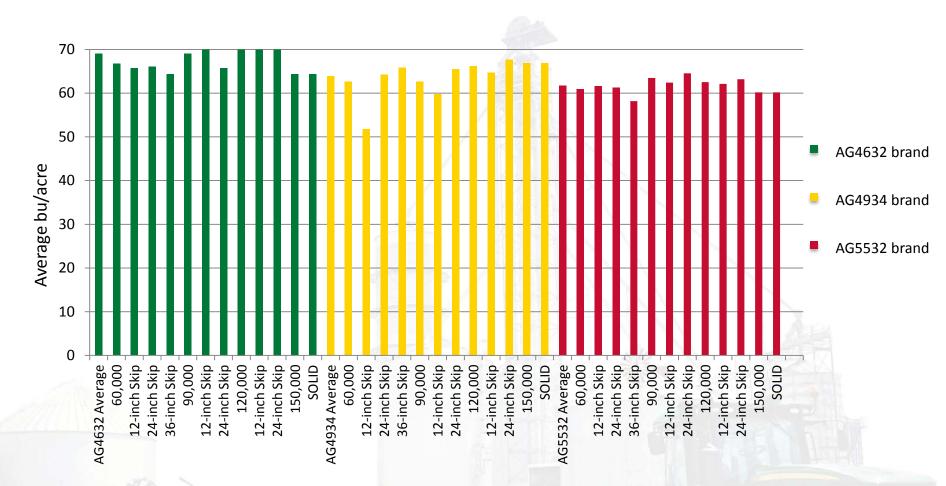


Figure 8. Response of three Asgrow[®] brand soybean products by population and stand variability.





• This 2014 demonstration is similar to a 2011 demonstration at the Monsanto Learning Center at Scott, MS, except the 2014 demonstration was conducted in a 60- to 70-bushel yield environment, while the 2011 demonstration was conducted in a 40-bushel yield environment.

The demonstration indicates that:

- Soybeans are very elastic in their response to thin and/or skippy stands.
- Population did not have a significant impact on yield.
- Soybean plants have the ability to compensate for some population reduction.
- Farmers should not intentionally plant thin stands.
- However, it is often possible to keep thin stands (not replant) with little impact on yield.
- It is likely that some soybeans are replanted unnecessarily.

Legal Statements



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.

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

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.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Asgrow and the A Design® and DEKALB and Design® are registered trademarks of Monsanto Technology LLC. Deltapine® and Leaf Design® are registered trademarks of Monsanto Company. All other trademarks are the property of their respective owners. ©2014 Monsanto Company. 141017121209 120114JEH.





THANK YOU



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.



