SOYBEAN RESPONSE OF THREE POPULATIONS TO SINGLE VS TWIN ROWS.

Study Goals

Midsouth soybean growers are interested in determining the best combination of row configuration, population, and soybean product for optimum soybean yield. Cotton growers want a soybean row configuration that is compatible with their cotton planting equipment.

Study Guidelines

A soybean demonstration trial was planted on April 25, 2013 at the Monsanto Learning Center near Scott, MS to:

- Demonstrate the effect of agronomic practices on soybean yield.
- Determine optimum soybean populations for the Midsouth.
- Evaluate how soybean products respond to various row configurations and populations.

Seven Asgrow® soybean brands (AG4531, AG4533, AG4534, AG4632, AG4633, AG4933, and AG5332) were planted in both twin rows (7.5 inches apart on 38-inch beds) and single (38-inch) rows, and at populations of 90,000, 120,000, and 140,000 seeds per acre in each of the row configurations. Standard agronomic practices for the area were implemented with irrigation provided as needed.

Results and Observations

Twin rows generally produced higher yields than single rows; however, some soybean product response was observed. Planting soybeans on 38-inch beds provided improved drainage and allowed planting of twin rows, spaced 7.5 inches apart, on top of the bed. Yields were similar across all soybean products, row configurations, and most populations. Some differences, likely based on plant architecture, were observed in the single vs. twin-row plantings. In this demonstration, it appears that soybeans respond better to higher populations when planted in twin rows. Lower populations may help in the management of both lodging and disease. Soybean products should be evaluated on a case-by-case basis to determine how they fit into any production system.

Summary Comments

Soybean products that will perform well in various row configurations and at various populations are available to Midsouth soybean growers. Growers should evaluate soybean products to determine which products have the highest probability of performing well in a specific combination of row spacing and plant population.

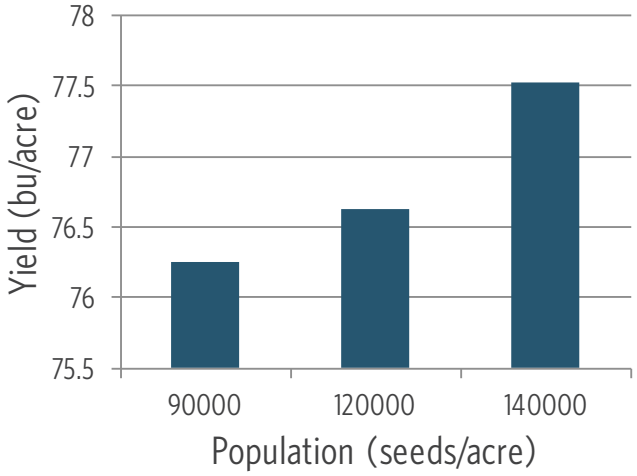

Figure 1. The trend toward decreasing soybean populations appeared to offer agronomic advantages and maintain the opportunity for optimal yield potential.

Legals

The information discussed in this report is from a single site, 2 rep 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.

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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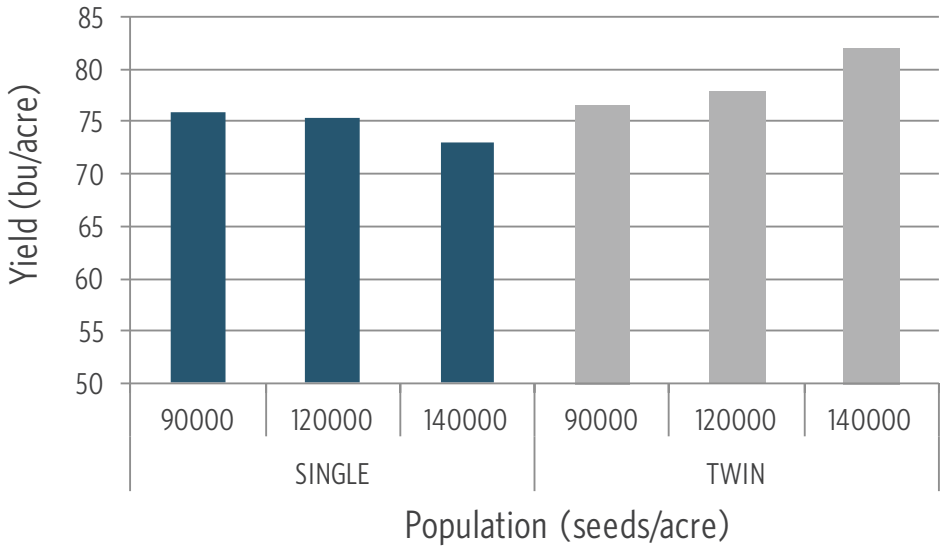

Figure 2. In this demonstration, twin rows generally produced higher yields than single rows. Soybean products planted in twin rows also responded better to higher plant populations.

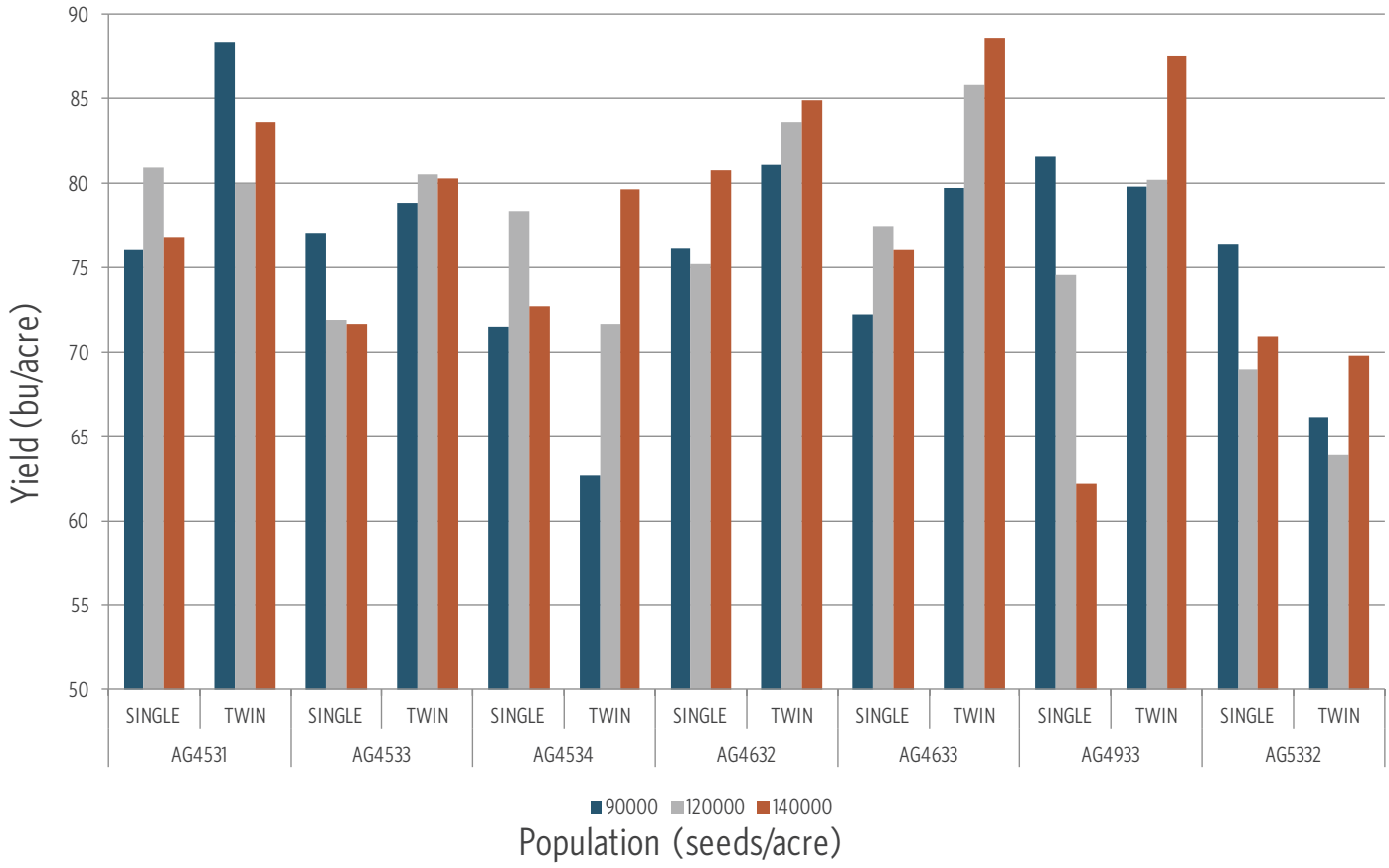

Figure 3. Soybean products should be evaluated on a case-by-case basis to determine how they fit into any production system.