



# Influence of Soybean Seeding Rate at Three Planting Dates

## Trial Objective

- Planting date is an important factor for potential soybean yield. An earlier planting date could be a low-risk/high-return soybean management practice.
- A generally recommended practice is to increase the seeding rate when soybean planting occurs later in the season.
- This trial was conducted to determine the effect of the seeding rate on the yield of soybean across three planting dates.

## Research Site Details

Location	Soil Type	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield (bu/acre)	Seeding Rate (seeds/acre)
Monmouth, IL	Silt loam	Corn	Conventional	4/25, 5/23, 6/4/18	10/17/18	60	60K, 100K, 140K, 180K

- A 3.7 relative maturity group Roundup Ready 2 Xtend® soybean product was planted at three planting dates (April 25th, May 23rd, and June 4th) and four different seeding rates (60,000, 100,000, 140,000, and 180,000 seeds/acre).
- There were two replications for each treatment, all replications received the same weed management program.

## Understanding the Results

- The average yields increased with earlier planting dates. The average yields across all seeding rates for the April 25th, May 23rd, and June 4th planting dates were 74.2, 71.7, and 66.6 bu/acre, respectively.
- The 140,000 seeds/acre seeding rate provided the highest yield at the earliest and mid-planting dates. At the latest planting date, there was only a 2.5 bu/acre difference in average yield between all seeding rates.

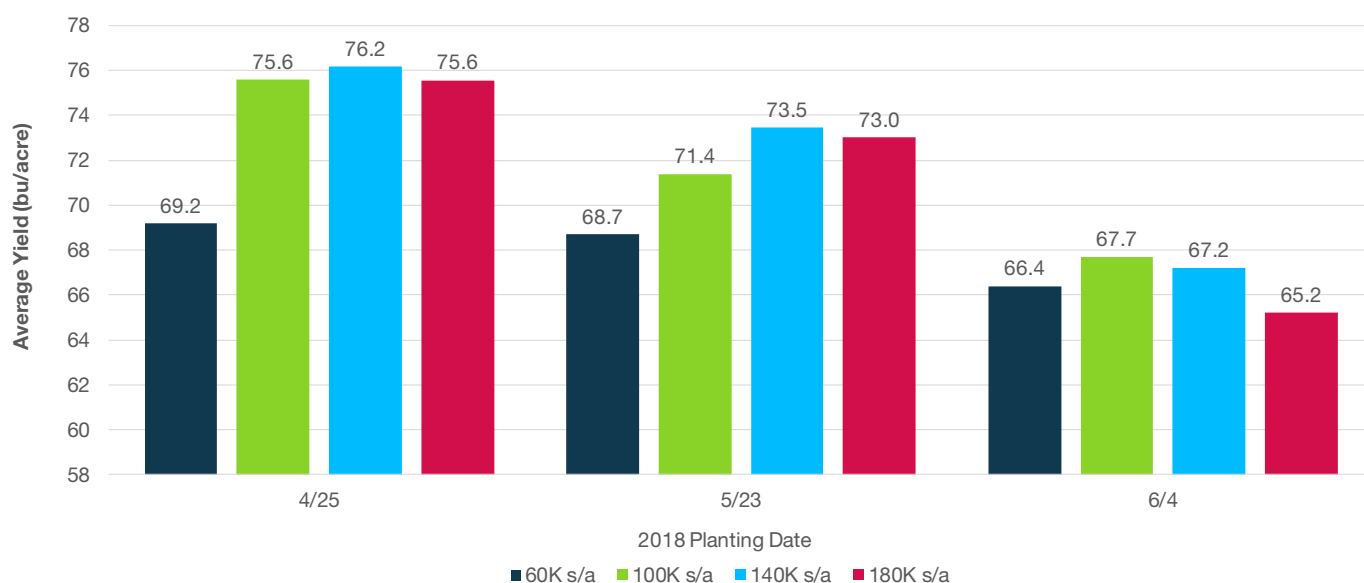


Figure 1. The influence of planting date and seeding rate on average soybean yield at the Monmouth Learning Center, 2018.



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## What Does This Mean for Your Farm?

- Our studies at the Bayer Learning Center at Monmouth, IL generally agree with regional University planting date studies in that early planting of soybean tends to provide a higher yield potential than later planting.
- Early planting assumes that the soil and weather conditions are suitable for seedbed preparation and seed germination; the actual planting date will vary year to year based on weather and field conditions.
- Contact your District Sales Manager or Technical Agronomist for planting recommendations.
- For this specific site and testing year there was no observed influence in different seeding rates and planting dates and this study will be repeated again in 2019.

## Legal Statements

The information discussed in this report is from a single site, replicated demonstration. This information 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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**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. **Glufosinate** will kill crops that are not tolerant to glufosinate. Contact your seed brand dealer or refer to the Technology Use Guide for recommended weed control programs.

**Performance may vary**, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

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