



Corn Yield Response to Seeding Rate and Row Spacing

Trial Objective

- As corn products are developed to have higher yield potential and better stress tolerance, the optimum seeding rate has steadily increased.
- Previous work at the Bayer Learning Center at Monmouth, IL suggests the optimum seeding rate for most corn products is around 38,000 seeds per acre in our yield environment.
- Previous work at the Learning Center suggests row configurations narrower than 30 inches may increase stress reducing potential yield benefits at seeding rates greater than 38,000 seeds per acre.
- This demonstration was conducted to evaluate the yield response to seeding rate and row spacing.

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	Soybean	Conventional	6/5/20	10/27/20	250	35K, 45K

- Treatments consisted of two seeding rates and three row configurations for a total of six treatments.
 - Seeding rates:
 - 35,000 seeds/acre
 - 45,000 seeds/acre
 - Row configurations:
 - 30-inch
 - 20-inch
 - Twin rows on 30-inch centers
- Each treatment was replicated twice.



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Understanding the Results

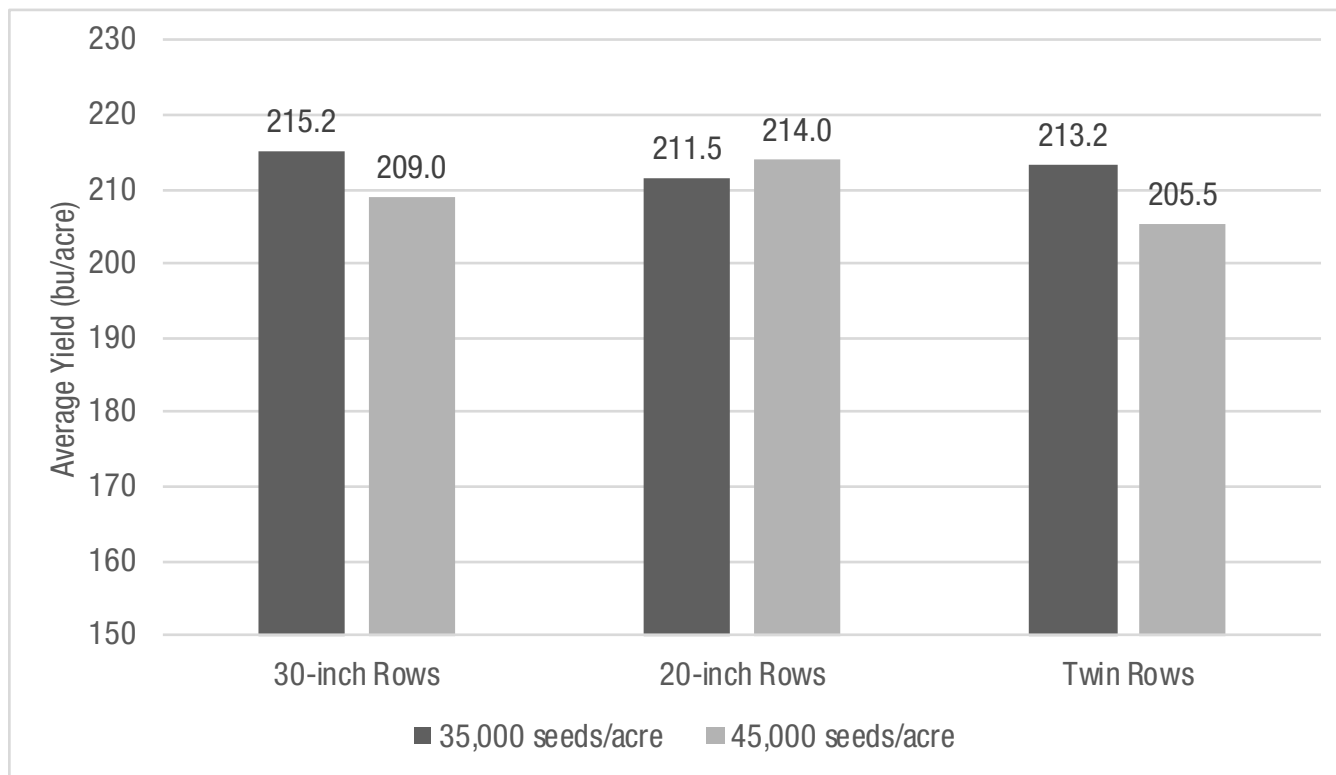


Figure 1. Average corn yield response to seeding rate and row spacing.

Key Learnings

- The results from this demonstration were contradicting to similar work at the Bayer Learning Center over the past several years:
 - Response to either seeding rate or narrower row configuration was not consistent.
 - The very late planting date and other factors may have created more plant growth limitations compared to stresses from plant density.
- The Bayer Learning Centers have generated robust data around optimum plant density for corn. Consult your local Field Sales Representative or Technical Agronomist on tailored recommendations for your specific farm.

Legal Statements

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

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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