



Single Row Seeding Rate Differences in Corn

Trial Objective

- Previous research at the Bayer Crop Science Learning Center at Monmouth, IL would suggest the optimum seeding rate for corn is approximately 36,000 to 38,000 seeds per acre, depending on soil type and genetics.
- A study was conducted to determine if there is any advantage or disadvantage to planting different seeding rates in alternating rows compared to planting a uniform seeding rate in all rows.

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 tillage	5/2/20	10/8/20	250	36K

- In this study, all plots were planted at a rate of 36,000 seeds/acre. However, there were two different seeding rate treatments:
 - All rows evenly spaced at 36,000 seeds/acre.
 - Seeding rate for each row alternated at 24,000 and 48,000 seeds/acre, for an average of 36,000 seeds/acre.

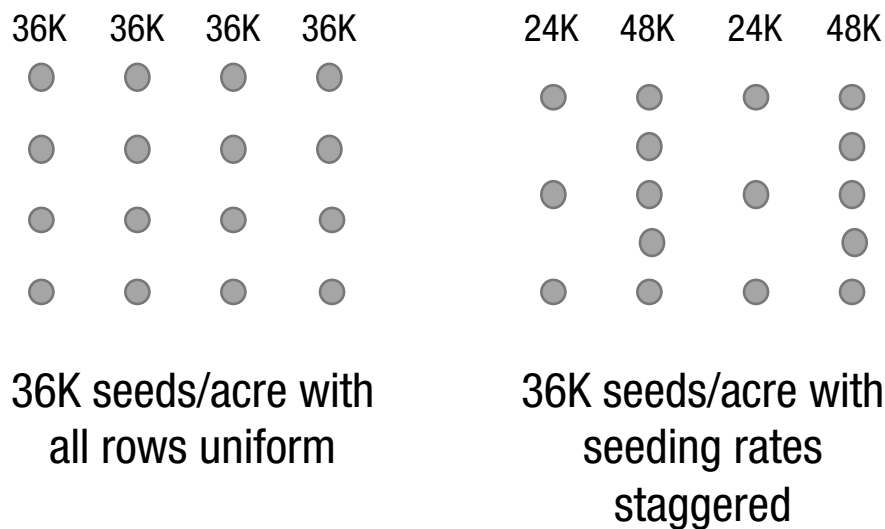


Figure 1. Graphic representation of seeding rate pattern for each treatment.

- Treatments were planted with a commercial planter equipped with individual row control precision technology.
- Each treatment had four replications.



Single Row Seeding Rate Differences in Corn

Understanding the Results

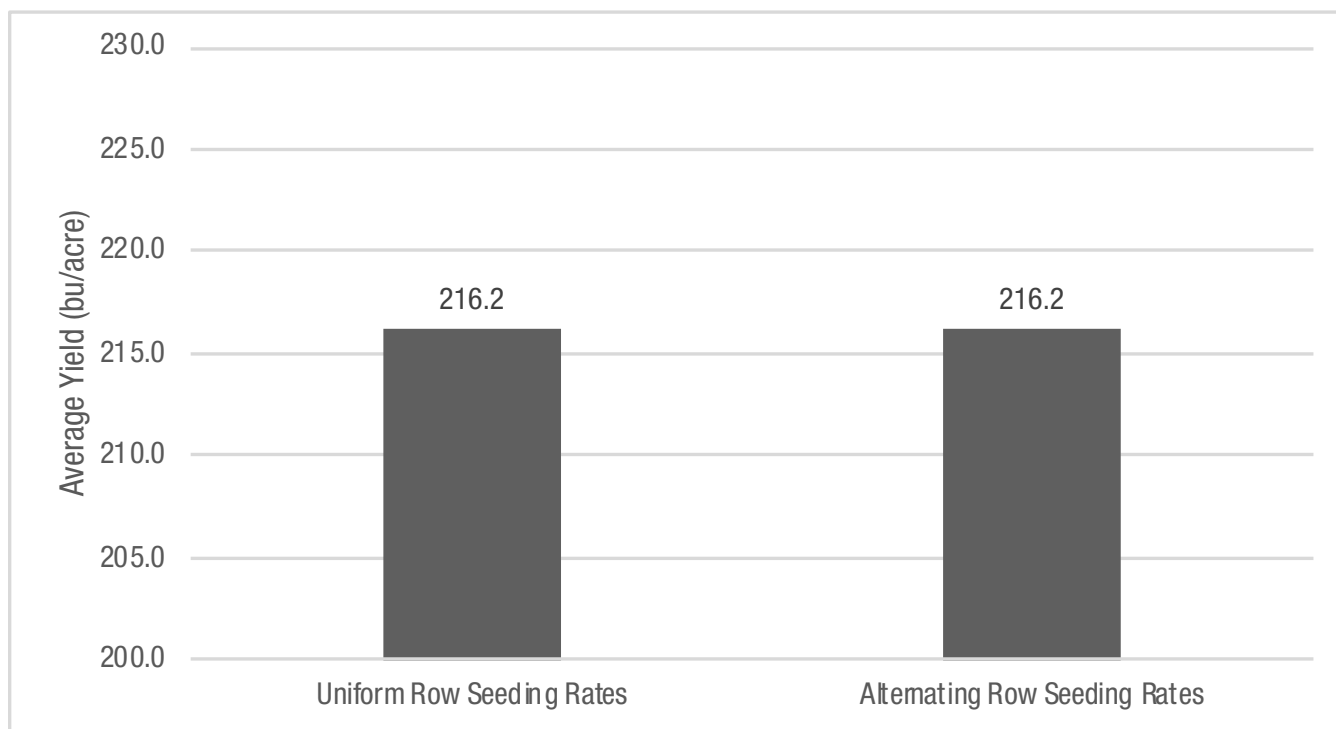


Figure 2. Average yield (bu/acre) comparison of uniform row seeding rates (36,000 seeds/acre) and alternating row seeding rates (24,000 and 48,000 seeds/acre, for an average of 36,000 seeds/acre).

- For this study, no average yield differences were observed between the two different row arrangements, as well as no differences in test weight and grain moisture.

Key Learnings

- Interestingly, it was observed that the uniform seeding rate treatment had more ears, but they were smaller. The alternating row seeding rate had fewer, larger ears. Thus, the overall average grain yield was the same.
- Soil type, fertility levels, growing conditions, and genetics may impact the results when alternating seeding rates in individual rows.
- Consult your local Field Sales Representative or Technical Agronomist for tailored recommendations to fit your 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.

©2020 Bayer Group. All rights reserved. 3013_R14_20

