Fine-Tuning Soybean Seeding Rates



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HOLT COUNTY, MO. A s the price of soybean seed increases, growers want to have adequate stands but at the lowest price per acre they can plant. Research at MU indicates that stands in 30-inch and 15inch rows can be as low as 110,000 plants per acre and

maximize yields. These are uniform spaced plants. What is faced in most fields are gaps in stands and a variety of planting conditions.

The hard issue becomes how to adjust the seeding rate so the right amount of plants grow for maximum yields under different planting conditions and germination rates. No-till seeding rates should be higher than reduced tillage. Adjustments should be higher for lower germinating seed. Poor planting conditions also should be adjusted upward. Early planting dates with cool and wet soil conditions are also a situation in which seeding rates should be increased.

Typically at the Graves-Chapple Farm, soybeans are planted at a rate of 170,000 plants per acre. With residue issues and generally poor soil conditions, seeding rates are adjusted upward. Once planted, the stand will be established and it is generally not in the best interest to replant.

Research results indicate the seeding rates for both 15-inch and 30-inch rows should be the same. Many times growers will adjust rates for row spacing, but this is not necessary.

Seeding rates were much higher when drills were used to plant soybeans. Often drills did not cover seed well and depth control was imprecise. Seeding rates were increased to compensate. In addition, higher soybean populations provide a canopy which helps with weed control.

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