

Evaluation of Peanut Seeding Rate on Yield**Summary**

Evaluation of peanut seeding rates through a local research plot encourages growers to assess current planting practices. Farmer adoption of reduced seeding rates will increase peanut profits.

Situation

Jeff Davis County grows over 10,000 acres of peanuts annually. During the 2019 Jeff Davis County Peanut Production Meeting a discussion was started on UGA recommended peanut seeding rates. The majority of the peanut acres in the county are planted at 9 or more seed per foot. According to the 2019 UGA Peanut Production Guide, growers should plant 6 seed per foot on singles and 6 to 7 combined seed per foot on twins. The average cost for peanut seed in 2019 was \$0.85 per pound. Rising production costs and declining commodity prices mean that our farmers must manage inputs wisely.

Response

To evaluate the validity of the seeding rate recommendation in our area the county agent coordinated a peanut seeding rate study in collaboration with UGA Peanut Agronomist, Scott Monfort. A cooperating grower in Jeff Davis County agreed to put the research plot on his farm. A randomized 4 treatment test was conducted on different seeding rates using Georgia-06G the top planted peanut variety. The first treatment was the grower standard of 8 to 9 seed per foot planted using a Virginia plate. The second, 8 to 9 seed per foot with the Virginia plate using the UGA planter. Third, 6 to 7 seed per foot with the Virginia plate. The fourth, 6 to 7 seed per food using the large edible bean plate. The trial consisted of 12 row plots, planted on April 29th and harvested on September 19th. The goal of this research was to evaluate the recommended UGA seeding rate in comparison with the county standard rate, and to build grower confidence in the UGA recommendations through local yield data.

Impact

Upon completion of the research there was no statistical difference in yield among the four seeding rates. This data concludes that under normal planting conditions no peanut yield is gained by planting the extra 3 seed per foot. On average, when planting GA-06G at 6 seed per foot farmers spend \$117 per acre on seed. At 9 seed per foot farmers would spend \$172 per acre. At a difference of \$55 per acre in seed expense. This equates to \$27,500 in savings for a 500 acre farmer.

A change in grower planting practice will take more supporting data. Growers in the county recognize the particular challenges they have on their farm. Some believe that adjusting seeding rate on a field by field basis is too much trouble. Numerous variables can affect the outcome of changed seeding rate; disease history of the field, planting date and planting practices. As we further evaluate this issue locally we will bring manageable obstacles to light. Taking the time to check planter efficiency and speed to ensure farmers are getting the correct amount of seed in the ground is half of the battle. The cooperating grower welcomed the opportunity to be involved in local research; stating that “this is good information, we are always looking for ways to be better farmers”. During the 2019 growing season numerous peanut growers around the county have watched the test plots progress. When

surveyed at the beginning of 2019, seventy five percent of growers stated that they used UGA recommendations shared at county production meetings on their farm the majority of the time. These growers are looking forward to seeing the results of this study and how they may change their operation.

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