This is Dr. Nathan Mueller, your local agronomist with Nebraska Extension for Dodge and Washington counties. We just finished up with the meetings for Nebraska On-Farm Research Results in Grand Island, Norfolk, North Platte, Alliance, and Beatrice. One attendee told me during one of the meetings that “many of the products and practices evaluated by producers did not increase yield or profitability.” I replied by saying, “it is just as important to know what doesn’t work as what is working.”

One of the most frequently evaluated soybean production practice over the past decade by producers in their field, with their own equipment, has been soybean seeding rates. Let’s review the results from 10 studies conducted from 2014 through 2017 that used similar seeding rates of 90, 120, 150, and 180K/acre. These studies were conducted in Merrick, Lancaster, Seward, Saunders, and Washington counties with yields levels ranging from 60 to 96 bushels/acre. Averaged across the 10 studies, a yield increase of 2 bushel per acre was measured by increasing the seeding rates from 90K to 120K, with no further yield increases above 120,000 seeds per acre. Looking at each individual study, 4 studies recorded the most profitable seeding rate was actually 90K. The two 2018 soybean seeding rate studies also showed no advantage to increasing seeding rates above 100,000 seeds per acre. You can find and view all the past soybean seeding rate studies conducted by Nebraska farmers at resultsfinder.unl.edu.

Our current recommendation based on Nebraska on-farm research studies is to plant 120,000 soybeans seeds per acre. Current recommendations from Iowa State University are 125,000 to 140,000 seeds/acre, so very similar. Regional research data has concluded that 100,000 plants per acre as harvest is a great target. Due to lower germination percent on some soybean seed lots this spring, check your tag, and increase seeding rates slightly above 120,000 seed per acre if needed to achieve a final stand of 100,000 plants per acre.

Inherently we try to minimize the risk of a poor stand through using fungicide seed treatments, planting extra seed, and buying hail insurance. I believe that fungicide treated seed planted at 180,000 seed/acre and purchasing hail insurance is too costly of a risk management plan. So purchase the hail insurance, use fungicide-treated seed, but reduce you seeding rate down to at least 140,000 seeds/acre.

To listen to this radio message again and to get more information, you can also visit our local website at croptechcafe.org or give me a call at 727-2775. Remember, know your crop, know your tech, know your bottom line. This is Dr. Nathan Mueller, your local agronomist for Nebraska Extension on KTIC radio.