SOYBEAN SEEDING RATE

Two weeks ago, after the first rain of the season (and some wind), I decided to climb on the roof one more time to replace some loose shingles. It took four different times on the roof a year ago to fix all the problems caused by the December of 2021 wind, and I decided then that I would never get up there again.

It had been a whole year though, so I had almost forgotten how much I hate heights. Unfortunately, my mind messed with me as I tried to make the transition from the ladder to the roof and I decided it just wasn’t worth it.

I retrieved the shingles I had already tossed on the roof, pulled my ladder down and laid it beside the house, and went inside to pout. It is a sad day when someone as tight as me is willing to pay someone else to do a simple job because I’m too wimpy to do myself.

Things change. Sometimes things change because we are forced to make a change, and sometimes we choose to change because we think it is a good idea. In my case, my wife thinks I am too old to be climbing on the roof anyway, and my mind apparently agrees.

If you have been planting soybeans for 30 years and haven’t made changes in your seeding rate, you were either really progressive 30 years ago, or you missed the memo and need to consider making a change now.

Thirty years ago the normal soybean seeding rate for many producers was 160,000 seeds per acre when seeding with a planter, and 210,000 seeds per acre when planting with a drill.
Most producers are dropping fewer seeds than that now.

In our own Riley County population studies, done about 10 to 15 years ago, we concluded that 120,000 seeds dropped with a planter was enough. Emergence and survival ranged from 85-95% in our plots, giving us a final stand of 102,000 to 114,000 plants per acre.

Recent research somewhat confirms what we learned in our own plots, but suggests that lower yielding environments can benefit from a higher seeding rate. Now, I don’t know where they did this research – the article says across the Midwest – but it definitely wasn’t all in Kansas. They defined a low yielding environment as anything below 60 bushels per acre.

The point made in the research article though is that producers can improve profitability by seeding at a lower rate in the better parts of fields and increasing the seeding rate in lower producing areas.

My definition of a low yielding environment for soybeans is more like 30 bushels per acre or less, so I would hesitate to put too much stock in their study,...if we hadn’t already seen somewhat similar results ourselves.

I’m not certain we need higher seeding rates in our low yielding environment, but I am convinced that 120,000 seeds per acre dropped is enough, if we can get a final stand of 100,000 plants or more. Research at K-State a few years ago also found that 100,000 plants per acre was the optimal target for our area, confirming what we had seen in farmer plots.

The final point I always make when talking about soybean plant populations is to be sure you are getting the stand you expect. If your drill only gets you 50-60% emergence instead of 85-95% emergence, then maybe you should use your planter instead of a drill. That might be another change you need to make.

I case you’re wondering how the roof situation turned out, I texted Ryan (my freshman at
K-State) and asked if he had any friends who like to climb on roofs and wanted to make an easy $100. He came the next day and did the job for me,....and even tried to turn down the $100.

If you have questions you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to gmcclure@ksu.edu.

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