

News Column

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SOYBEAN SEEDING RATE

It was parents' night at our kids' 4-H club meeting last Monday. Tradition in our club is that the parent takes over whatever office their child is elected to that year, so I got to be vice-president, in place of Ryan. It's a really easy job — you just sit at the table in front and do nothing for the majority of the meeting.

While doing nothing, I had a lot of time to check out the crowd in front of me and got to wondering why Tim was even there. Tim farms a lot of acres and I thought he would be in the field, planting corn. But there he was, looking relaxed and comfortable at the back of the room.

Upon adjournment, I immediately made my way over to visit with Tim to find out what was up. "Shouldn't you be in the field?" I asked.

Unlike his dad, Tim can be a somewhat laid-back guy. He just shrugged his shoulders and said, "The corn's all planted and it's still early to be planting soybeans. Besides, I don't want to put them in the ground and get two inches of rain on them later this week."

Fair enough. I agree. May 8 is plenty early to plant beans.

The conversation eventually turned to soybean seeding rates and the merits of planters versus drills for seeding soybeans. The chemical company rep, county agent, and farmer in the conversation all agreed that planters do a way better job.

Tim admitted that he had hooked onto his drill last year to plant a good portion of his soybeans. It is faster and he could cover more acres in less time. But, he wasn't going to do it

this year because his planters get a much better stand.

When we conducted soybean population studies 10 to 15 years ago we would ask farmers to plant or drill at their normal seeding rate, then $\frac{1}{2}$, $\frac{3}{4}$, and $1\frac{1}{4}$ the normal rate. Just before harvest we would count plants to see what the final stand was for each test strip.

Fields seeded with a planter would usually have final stands that were 85 to 95 percent of what the farmer reported planting. With drilled beans, final stands were often just 60 to 65 percent of what was seeded, and even as low as 50 percent on occasion.

After just one year counting final stands I decided that a good planter would be my first purchase when I started farming again.

The other thing we all learned by conducting those soybean population studies is that we didn't need to plant as many seeds as what K-State was recommending at the time. Twenty-five years ago, the standard recommendation for this part of the state was to drop 150,000 to 160,000 seeds per acre with a planter. When drilling beans, the seeding rate was often kicked up to 200,00 or 210,000 seeds per acre.

Most of the farmers cooperating in our seeding rate studies were dropping 160,000 seeds as their standard rate during the first year of the trial. After just one year though, the new standard for a couple of them was 120,000 seeds planted per acre. That's enough, and actually still more than we need in most dryland situations.

Recent research at K-State verifies what we learned 10 years ago. In most dryland situations, a final stand of 100,000 plants per acre is plenty. Most of the time, 80,000 plants per acre will maximize yield. Therefore, dropping 120,000 seeds per acre should be safe, providing a final stand of 102,000 plants if emergence is 85 percent.

Under irrigation, I might still drop 150,000 to 160,000 seeds per acre, but no more. If

that amount doesn't provide optimal yields, I don't need more seed. Instead, I need a better planter.

Now, back to 4-H parents' night. One year my child (Samantha) was the song leader. There was NO WAY I was going to get up in front of a group and sing. Instead, I traded for the president's job. Yes, it was a lot more work,....but I'm confident everyone was glad I didn't try to lead singing.

If you have questions about soybean populations and seeding rates, you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to gmclure@ksu.edu.

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