SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – RACHEL VANN

 Farmer Blog

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Why did you decide to pursue a career that includes soybean research?
I became passionate about working in applied agricultural research as an undergraduate at the University of Illinois. I did my graduate work in North Carolina, and I was delighted to be able to continue to work in the state in a faculty position focused on helping North Carolina soybean farmers optimize profit and sustainability. Both the rotational complexity and strength of the Extension system in the state are phenomenal aspects of working here as an agronomist.

What research topic have you completed in the past or are working on now that could have or has had the most significant impact on soybean production?
We are currently dedicating a lot of energy to investigating optimal planting dates and maturity groups to maximize yield and quality for North Carolina soybean farmers. These management practices were identified as critical components of high-yielding soybeans in the state based on a recent analysis of 877 N.C. Soybean Yield Contest entries, but there has not been a lot of research recently. It is very exciting to conduct research that directly benefits growers in the short-term by focusing on adjusting these foundational agronomic practices to increase yield.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
The N.C. State Soybean Extension Program has historically received strong support from our state checkoff program. This strong relationship between N.C. State and the N.C. Soybean Producers Association is critical to ensuring practical solutions are delivered to

growers that address their immediate production concerns and identify future opportunities for improving soybean production in our area. On the national level, we are excited about the [Science for Success](#) initiative supported through the United Soybean Board. This team of Soybean Extension specialists from across the U.S. is working together to deliver best management practices to farmers through leveraging local expertise and research funding for national Extension impact.

Within your area of expertise, what are the top two or three general recommendations you would offer farmers to improve their management practices?
We have great diversity in soybean management strategies used across North Carolina resulting in wide diversity in achieved yield. However, our overall state soybean yield average remains low at 35 bushels per acre due to soil type and rotational complexity. For many N.C. growers, strides can be made in increasing soybean yield by focusing on foundational management strategies like optimizing planting date, selecting appropriate varieties and robust foliar disease management. We are emphasizing that shifting to some of these high-yielding management strategies will require some management adjustments for many producers in the state.

SRIN articles:

[How Soybean Growth Habit Factors in Variety Selection](#)

[Developing a Soybean Planting Playbook](#)

[Can Aggressive Pest Management Protect Seed Quality?](#)

[Setting Graduate Students Up for Success in the Soybean Industry](#)

Additional resources provided by Rachel Vann include:
Science for Success Videos: [Best Practices](#)**,** [Soybean Planting Date](#)**,** [Determining the Optimal Seeding Rate](#)**,** [Row Spacing](#)
or **Downloadable PDFs:**
[Soybean Plant Population Density,](#) [Row Spacing](#)**,** [The Best Soybean Planting Date](#)

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