SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – JEREMY ROSS

Farmer Blog

Jeremy Ross, Professor and Soybean Extension Agronomist, University of Arkansas Cooperative Extension Service

Why did you decide to pursue a career that includes soybean research?
I fell into this position. In college, I didn't know what I wanted to do, but I started working in a plant pathology lab, which led to earning a master's degree. I worked for a plant pathologist for a few years. Then I did corn and sorghum verification for Arkansas Cooperative Extension Service for seven years, and I earned my doctorate during that time. This position with a focus on soybeans opened up as I graduated in 2007, and I've been doing this ever since. I enjoy working with soybean farmers, helping them solve their problems.

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?
Research showing the value of using an inoculant on late-planted soybeans is paying off for Arkansas soybean farmers. They usually plant about half their soybean acres after June 1. My research showed that for soybeans planted after mid-May, adding an inoculant needs a yield increase of just one-third to one-half of a bushel per acre to pay for it, and we consistently see yield increases of 5 to 10 bushels per acre.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
The soy checkoff provides funds to do this research. The funds and the farmers who volunteer to oversee the allocation of the checkoff make it possible for us to answer a lot of questions. I value having a good relationship with the farmers serving on the Arkansas Soybean Promotion Board.

Within your area of expertise, what are the top two or three general recommendations you would offer farmers to improve their management practices?

- *Use narrow row spacing when planting soybeans. We have a lot of data showing that narrow rows increase yield.*
- *About 85% of Arkansas soybeans grow under irrigation. Using soil moisture sensors and programs that improve the efficiency of furrow irrigation can minimize over- or under-irrigating. Improving water use efficiency supports soybean profitability.*
- *Spend the time needed to pull soil samples and track data. Building a long field history allows farmers to see nutrient trends over time to better maintain soil fertility.*

Within your area of expertise, what do you consider to be critical soybean research needs that can impact the profitability of famers in the future?
One major risk farmers face is the loss of herbicides as weed control tools due to weed resistance. Palmer amaranth is developing resistance to multiple herbicides. We need research to identify long-term weed control options when chemicals don't work well. We also need to pay attention to the economic profitability of soybeans for our farmers as they compete with other global regions for market share and adapt to address consumer concerns.

SRIN articles:

How Flooding Soybeans in Early Reproductive Stages Impacts Yield, Seed Composition

Testing Emerging Input Recommendations

SOYBEAN RESEARCH & INFORMATION NETWORK

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