SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – AVAT SHEKOOFA

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Why did you decide to pursue a career that includes soybean research?
During my undergraduate studies, I took a class on plant physiology that changed my life. I was fascinated by how plants respond to different environmental conditions. Soybeans are a strategic plant, extremely important to feeding the world. I am interested in how they respond to different stress factors, and my research plays a role in ensuring efficient soybean production continues and improves.

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?
Water use and availability is the biggest issue for agriculture, and many research discussions go back to that. My research related to better, more efficient use of water for soybean production, whether it focuses on irrigation timing, cover crops or genetics, has the biggest impact on long-term soybean production.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
I am thankful to the Tennessee Soybean Board for funding soybean research. I also appreciate that they come with their questions about production, which tell us if our research is meeting their needs. Working with the farmers and checkoff funding refines the process of prioritizing research as we dig into ideas, apply what we learn and share the results. With their help, we develop more ideas, fund students' work and find answers to help more farmers.

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

- *They should be open to using new technologies, especially tools that save water. They should learn about available irrigation technologies and consider how to incorporate them to improve water use efficiency.*
- *They also can make better production decisions when they are aware of the production aspects of their land. They need to understand soil type, soil quality and water availability. Then, they should use the data and resources available to them to make sound decisions. Those resources include researchers, specialists and local extension agents who can provide information to help make production decisions.*

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?
Farmers need research into how soybean varieties can better manage environmental impacts and extreme weather conditions. They also need research about how to use new technology and precision tools. In my opinion, improving collaboration between agricultural scientists and engineers will help improve both crop water use efficiency management and crop productivity.

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