BEN FALLEN – SOYBEAN RESEARCH PROFILE

Farmer Blog

Ben Fallen, USDA-ARS Research Geneticist and USDA Assistant Professor at North Carolina State University

Why did you decide to pursue a career that includes soybean research?
I was born and raised on a tobacco farm in Virginia. I went to college knowing I wanted to pursue a career in agriculture, but I wasn't sure what that would look like. During undergrad at Virginia Tech, a buddy invited me to work with him as an hourly student in a soybean breeding lab. When I graduated, I continued working there as a technician, and then I earned my graduate and doctorate degrees. And I never got out of soybeans. The opportunities in soybeans are pretty incredible, and the soybean breeding community is small and supportive.

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?
I think my work exploring the genetic diversity of wild soybeans to find good traits that can be incorporated into commercial soybeans will have the most significant, long-term impact on soybean production. This work has found potential to increase protein content without impacting yield, traits to support drought tolerance and more. As a USDA public breeder, I have more opportunities to work on long-term goals.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
Funding from the soybean checkoff is a very vital part of the program. As a major commodity, soybeans get less interest from many agencies funding research. The soy checkoff also supports training students, who will become the next generation of researchers, helping farmers solve the next generation of issues. This funding allows us to do more, especially through collaboration. We can accomplish more when we work with more researchers than just breeders.

Within your area of expertise, what are the top two or three general recommendations you would offer farmers to improve their management practices?
Farmers understand the whole dynamic of how multiple crops work in their fields, so I often go to them for advice. However, when it comes to soybean variety selection, farmers should make decisions for each location, accounting for pest pressure and susceptibility to stresses like drought or flooding. They should also look at data from independent variety trials. I also encourage them to keep soybean composition in mind.

Within your area of expertise, what do you consider to be critical soybean research needs that can impact the profitability of farmers in the future?
I expect the focus on sustainability to increase, so research on characteristics like drought and flood tolerance will continue to be important. We are losing land for production as the global population grows, so we need to work together to develop genetics and management practices to grow a better product for end users.

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SOYBEAN RESEARCH & INFORMATION NETWORK

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