SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – ANDREW SCABOO

Farmer Blog

Andrew Scaboo, Assistant Professor, Plant Science and Technology, University of Missouri

Why did you decide to pursue a career that includes soybean research?
Growing up, my mother was into plants and vegetable gardening, and I enjoyed helping her. I went to the University of Tennessee and majored in plant and soil science. In the summer between my junior and senior year, I did a practicum with Dr. Vince Pantalone, a soybean breeder and a great mentor. This is where I fell in love with agriculture and soybeans. I went on to the University of Arkansas and earned my Ph.D. in plant breeding with Dr. Pengyin Chen, and worked with Dr. Tommy Carter with the USDA at North Carolina State University.

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 what has had the most impact is our cultivar development. We've licensed a lot of germplasm to private companies, specifically and significantly, releasing the SOYLEIC™ soybean cultivars. The University of Missouri breeding program released some of the first publicly available high oleic, low linolenic soybean varieties. Drs. Kristin Bilyeu and Grover Shannon discovered the trait, and my program released the cultivars that farmers are growing now.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
The soy checkoff has been vital to my work developing new higher yielding, value-added soybean varieties. Developing the SOYLEIC™ varieties was a huge undertaking, and we did it, which has helped develop the market space for soybeans here and internationally. Actually, the soy checkoff is behind every single cultivar that I've developed.

And the checkoff in general has been instrumental in supporting the education of staff and students. With every research project, we're educating undergraduate and graduate

students so they can go on and either continue research or work at a major ag company, which impacts farmers' fields more than they realize.

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

- *As a soybean breeder, it may seem odd, but I think weed management programs are probably the number one concern a farmer should think about. It is hard to control weeds and many people outside of agriculture don't realize how bad of a problem it can be if farmers don't control them.*
- *Also, plant early. There are a few things farmers can control and being ready to plant at the earliest time they can is one that can be controlled to increase yield. Be prepared.*
- *Select the varieties that have traits important for your farm. Tailor your selection of varieties to maturity, disease resistance and herbicide package. Taking the time to find the cultivars with genetic resistance to help manage pathogens specific to your farm is crucial.*

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?
Education support needs to continue to keep agriculture advancing. When you look at a research project proposal, the majority of the money goes to salaries. The checkoff creates jobs and sustains this whole realm of graduate students, postdocs, and staff, which makes a big impact on the agriculture industry.

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SOYBEAN RESEARCH & INFORMATION NETWORK

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