

SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – ALYSSA ESSMAN

... Farmer Blog



Alyssa Essman, Assistant Professor – Weed Science, Ohio State University

Why did you decide to pursue a career that includes soybean research?

I grew up on a family farm, and I always liked science. During a college internship, I fell in love with weeds. They are really good at being plants. I enjoy soybean research, because I think soybeans are an interesting, resilient crop.

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?

My doctorate project looked at planting green in soybeans and the management needed to make it work, as well as the weed control advantages that it can provide. This is an area where farmer interest is increasing, and understanding the practice will help farmers implement planting green as a practice.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?

Working with the soy checkoff has been a great partnership with a genuine interest in helping farmers. It supports research where we take the results and translate them directly to producer practices.

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

- *Diversification is key. That diversification should include crop rotation, herbicide modes of action, cover crops and other cultural practices.*
- *Get comfortable experimenting on a small scale to figure out if a practice will work.*
- *Be on the lookout for new technology. Weed science is a rapidly advancing field, where we are looking at a variety of control options within and outside of the growing*

season to improve management. That technology will expand our options to manage weeds and herbicide resistance.

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?

Pigweed species are driving weed management right now, and seedbank management will be a huge component in the future of their management. Managing weeds long-term is different than other pests, because we have a sense of what species should be there in the future, and in what densities, based on what's there now. Seedbank research will help us learn how to forecast issues and improve our control strategies.

SRIN articles:

[Watching Waterhemp for Resistance and Integrated Control Strategies](#)



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