

SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – CAROLYN LOWRY

Farmer Blog



Carolyn Lowry, Assistant Professor of Weed Ecology and Management, College of Agricultural Sciences, Penn State University

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

I love thinking about how weather variability affects weeds and weed management. Soybeans are a very important crop both regionally and globally, and using cover crops before soybeans is becoming more common. Because cover crops may play a role in resilience for weather variability, focusing on soybeans is a natural fit.

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 research examining how extreme rainfall events influence the efficacy of residual herbicides of varying solubility and how a cereal rye cover crop impacts weed control efficacy has great potential to help soybean farmers protect their crops. As my first soy-focused project, it will lay a foundation for better understanding weed control under climate variability.

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

It is reassuring to know that a question is valuable, and that farmers see research as worthwhile. Working with the soy checkoff provides that assurance. Through those connections, I hear about issues farmers are dealing with, which builds confidence in establishing a research program to address those issues. That support also pushes me to keep asking these types of questions.

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 weed ecologist, I encourage farmers to incorporate diversity in herbicides, modes of

action, non-chemical weed control and crop rotations. Diverse weed management slows the development of herbicide resistance and preserves the longevity of effective herbicides and tactics.

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?

We need to continue evaluating weather variability and how that influences agronomic management practices.



This website is funded by the soybean checkoff



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