

SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – MIKE MARSHALL

Farmer Blog



Mike Marshall, Assistant Professor, Agronomic and Forage Weed Science, Clemson University

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

During my undergraduate studies, a weed science class sparked my interest, especially because managing weed pressure applies in any crop. As my education and career progressed, I focused on weed science, which allows me to work in all crops, including soybeans.

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 work to help farmers manage weeds. My research comparing products and programs and demonstrating the impact of weeds on crop yields provides them with practical data that allows them to better control weeds in their fields.

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

The soy checkoff helps provide funding for student workers and research costs, and that helps a lot. With that support, I can do relatively simple — yet very impactful — short-term studies that help farmers every year. I am very appreciative of that funding.

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

- *Spray weeds on time, to increase the effectiveness of control.*
- *Scout and observe changes in weed populations over time. This helps farmers notice problems like herbicide resistance or the appearance of new weeds so they can stay ahead of these problems.*

- *Practice rotating herbicide modes of action when possible. Make a list of the herbicides and modes of action used in each crop and change them up from one crop to another. Today, all our major crops in South Carolina tend to use herbicides from the same families, so crop rotation isn't necessarily effective in supporting herbicide rotation. One way to minimize this challenge is to include two or three herbicide modes of action in the tank every time they spray weeds.*

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 research to help us understand how changing climates and weather patterns impact weeds. Weeds tend to thrive under high temperatures and carbon dioxide levels, and research will help us understand if they could become more aggressive in the future.

SRIN articles:

[Research Survey Monitors Herbicide-Resistant Palmer Amaranth in South Carolina](#)



This website is funded by the soybean checkoff



©2024 Soybean Research & Information Network