

SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – MICHAEL PLUMBLEE

Farmer Blog



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

I decided to pursue a career that includes soybean research because I wanted to help farmers in South Carolina improve their production systems to maximize profitability and sustainability. Since soybeans are one of the state's major row crops, the impact I can have on farmers and the economy is great. I enjoy all aspects of farming, agronomy and conducting applied research.

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?

During the last two years, we have been conducting research on irrigation scheduling with soil moisture sensors in soybeans. This research will likely have the greatest impact on soybean production in South Carolina because of the potential number of acres that could be irrigated in the state coupled with preserving and utilizing water resources as best we can. Ultimately, we have set up experiments to determine the optimum soil moisture sensor threshold for soybeans that maximizes profitability and irrigation water use efficiency.

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

The soybean checkoff in South Carolina has enhanced my ability to find answers to production problems for farmers by ultimately supporting me and my research and Extension program in many ways. The soybean checkoff board has assisted with conducting research, providing on-farm locations for research, answering production questions, asking questions about the research to refine objectives and treatments, sponsoring Extension programs and allowing me to advise graduate students who can research specific problems in detail.

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

Within agronomy, my top two general recommendations I offer are:

1.) timeliness with all production activities and

2.) not forgetting the fundamentals when it comes to fertility, planting and overall crop protection.

Often, we try to overcomplicate various parts of production systems or look for new solutions that seem too good to be true. This can hinder profitability. Being timely with field operations and input applications can provide large yield and profit benefits.

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?

The research need I consider critical for soybeans is continued breeding efforts for host plant resistance to nematodes, pests and disease in high yielding germplasm. Reducing losses from these issues will help increase production and sustainability and time and money efficiency.

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