## SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – MARY LOVE TAGERT



Mary Love Tagert, associate Extension professor, irrigation water management, conservation, best management practices for water quantity and quality, Mississippi State University

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

I wanted to work on a topic important in the southeastern U.S. and my home state of Mississippi, and that led my education path in the direction of water resources. As irrigation has continually increased in Mississippi since the 1970s, it has been clear farmers needed more information. Soybeans are the top row crop here, so there was a natural gravitation toward that commodity.

## 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?

Quantifying the dual water quantity and quality benefits of surface water storage systems for irrigation has been important. Another ongoing project has been understanding how many soil moisture sensors are needed in a field and where to place those sensors for maximum benefit.

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

Soybean checkoff funds from the Mississippi Soybean Promotion Board have supported a lot of my research and Extension efforts. These funds have also helped me train graduate students who have continued with successful career paths.

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

1) Be familiar with your soils, especially if you are irrigating.

- 2) Use available tools like soil moisture sensors to help improve irrigation timing and potentially save water and money. Start small maybe just on one or two fields and get comfortable with how they work. Then expand in subsequent years.
- 3) Connect with your county Extension office for the latest research and training opportunities.

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 to improve irrigation efficiency, increase the use of surface water for irrigation where annual precipitation is plentiful outside of the growing season, and increase the affordability of site-specific management, whether that is related to drainage, irrigation or other inputs for pest control and weed management.



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