



## Mississippi Corn Promotion Board 2014 Progress Report

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Project Title: Row-crop Irrigation Science and Extension and Research (RISER) Program

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### Project Summary (Issue/Response)

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The RISER Program will be used to 1) validate the ability of irrigation water management (IWM) tools to reduce water use while maintaining or improving corn yield and profitability through on-farm demonstration plots; and 2) provide first-hand learning opportunities for existing and new irrigation management tools. Learning opportunities will be provided by 1) utilizing yearly in-service training to educate county extension agents, NRCS personal, private consultants and private sector representatives on irrigation BMPs installed at RISER locations, i.e., PHAUCET, soil water budgets, soil scheduling tools, meter utility, proper irrigation set design, etc.; 2) conducting on-site field-days at multiple RISER locations within the growing season; and 3) providing one-on-one, on-farm consultations for producers interested in adopting the latest RISER validated technologies. RISER locations will be implemented with flow meters to determine cumulative water use. Yield and yield components will be determined for both RISER and Producer controlled fields. Water and yield data will be used to document BMP effectiveness at the field scale. Collecting field scale data at multiple locations across years will allow MSU personal to more effectively identify key physiochemical parameter(s) required for individual BMP success.

### Project Results/Outcomes

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Funding by the MCPB was instrumental in supporting Mississippi State Universities' 2014 Row-Crop Science Extension and Research (RISER) Program. Irrigation water management tools including Pipe Planner, surge irrigation, in-season tillage, PAM and soil moisture sensor technologies were showcased at 19 locations. Data from RISER locations indicate potential to maintain corn yield, improve profitability by \$38/acre while using 48% less water. Additionally, MCPB funding provided opportunities for MSU extension personal to transfer RISER results to private and public sector stakeholders. Fifteen popular press articles were written and distributed by various entities including Growing Mississippi, Delta Farm Press, Delta Business Journal, Mississippi State University Ag. Communications, Peanut Farmer and Manship Digital News. Eleven on-line videos were produced by Delta Farm Press, Farmweek and the Mississippi Soybean Promotion Board. Twenty-one blog articles were posted onto the Mississippi Crop Situation Blog and received over 1,000 hits during the year. Irrigation water management strategies were discussed at six field days (322 stakeholder contacts), seven in-service-training seminars (239 county agent contacts), forty-two grower meetings (2,929 stakeholder contacts) and seventeen technical meetings (525 stakeholder contacts).

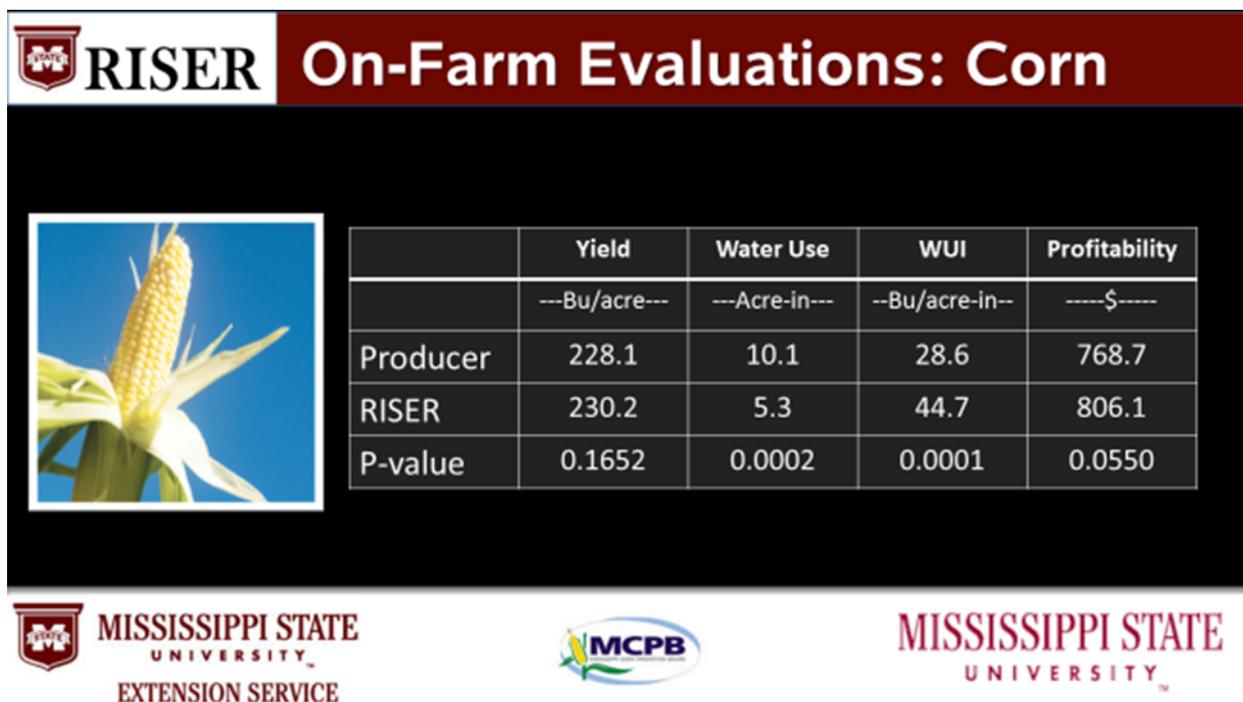
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## Project Results



## Project Impacts/Benefits

The RISER program demonstrates potential for irrigation water management tools to improve on-farm profitability up to \$38/acre while reducing water use by 50%. Additionally, the RISER program serves as a catalyst for the adoption of IWM that will make Mississippi corn producers more profitable while reducing demand on the Mississippi Alluvial aquifer by 50%.

## Project Deliverables

2014 Popular Press including Delta Farm Press, MSU Ag Communications, The Enterprise-Tocsin, Manship Digital News and Delta Business Journal

10 Online Videos including Delta Farm Press and Manship Digital News

21 Blog Articles on Mississippi Crops

3 Invited Scientific Talks at National Conservation Systems Cotton and Rice Conference and Mississippi Water Resource Institute Annual Conference

6 Field Days

7 In-Service Trainings

42 Growers Meetings

14 Technical Presentations

