



COTTON VARIETY TRIALS (2015–2024 CROP YEARS)

Challenges

- While Mississippi cotton acreage fluctuates annually, yield from 2015–2024 crop years increased by 23.6%. However, the real price of cotton (accounting for inflation) fell by 31.2% across this same time period.
- These economic conditions, combined with 40 or more variety options suited for Midsouth growing conditions, present a set of challenges for Mississippi cotton producers that, without broad, independent variety testing, make it difficult for farmers to make informed choices.

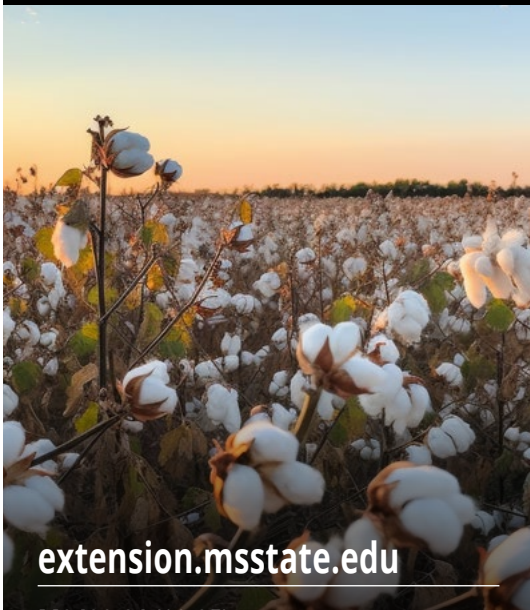
EXTENSION RESPONSE

To help producers with these challenges, Mississippi State University Extension Service faculty and professional staff developed the MSU Extension On-Farm Cotton Variety Trials Program.

- The program evaluated 10 varieties each year from 2014 to 2023 (2015–2024 planting years).
- The program allows growers, crop consultants, and other professionals to observe the performance of elite varieties, plant and lint characteristics, and environmental responses.
- The trials represent typical Mississippi cropping systems (irrigated and dryland) and multiple locations to increase the reliability of results.
- Seed companies are granted the discretion to enter their best adapted varieties and genetic traits; this helps to create an elite group of varieties for evaluation.
- Trial data indicate that the average yield for the 2015–2024 crop years could increase by **145 pounds of lint per acre** if top trial varieties were used.

ECONOMIC IMPACTS

- A 90% adoption rate could result in an estimated **\$392.7 million** revenue increase for Mississippi cotton producers for the 2015–2024 crop years.
- We predict that these estimated revenue increases resulting from increased yields could support **2,354 jobs** in the Mississippi economy earning **\$102.5 million**, generate **\$169.5 million** in value-added, and result in **\$521.4 million** in output.
- This program could generate an estimated **\$1 million** in county government taxes, **\$1.3 million** in special district (e.g., school district) taxes, and **\$506,898** in municipal taxes.
- We estimate that state tax revenues could increase by **\$8 million** and federal tax revenues by **\$26.9 million**. These tax revenues support public goods and services and would increase as a result of the increased yields.



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TAKING CARE OF WHAT MATTERS