



COTTON VARIETY TRIALS (2024 CROP YEAR)

Challenges

- Mississippi cotton acreage increased from 395,000 acres in 2023 to 515,000 acres in 2024 (an increase of 30.4%). In addition, average yields increased 6.8%, while the real average annual price (accounting for inflation) fell by 20.3% from the 2023 crop year.
- 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 submitted by five companies in 2023 for the 2024 planting year.
- 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.
- 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 yield for the 2024 crop year would increase by 116 pounds of lint per acre if top trial varieties were used.

ECONOMIC IMPACTS

- A 90% adoption rate of the top trial varieties could result in an estimated **\$35.2 million** revenue increase for Mississippi cotton producers in 2024.
- This revenue increase could support **229 jobs** in the Mississippi economy earning **\$12.1 million**, generate **\$23.2 million** in value-added, and result in **\$59.3 million** in output.
- This program could generate an estimated **\$174,210** in county government taxes, **\$214,801** in special district (e.g., school district) taxes, and **\$86,097** in municipal taxes.
- We estimate that state tax revenues could increase by **\$1.2 million** and federal tax revenues by **\$3 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