



CORN SEED HYBRID TRIALS INCREASE PROFITS

Challenges

- Between the 2002 and 2022 Censuses of Agriculture, planted acres of corn for grain increased 19.5% and average planted acres per farm increased 67.7%.
- Genetically modified seed is used on 91% of corn acres; many were “stacked” varieties that offered multiple protective traits such as multiple types of pest resistance, herbicides, and drought tolerance.
- With 200 or more seed options with little or no broad independent testing, Mississippi producers have little basis to effectively evaluate seed.

EXTENSION RESPONSE

To help producers face this challenge, Mississippi State University Extension Service faculty and professional staff developed the MSU Extension Corn Hybrid Demonstration Program.

- The program annually evaluates 23 of the top-performing corn hybrids from eight seed companies in 20 or more local, on-farm demonstration plots throughout the state.
- The program allows growers, crop consultants, and other professionals to observe the performance of elite hybrids, plant characteristics, and environmental responses.
- Hybrid seeds are voluntarily entered for testing and must be validated by producing superior yield in university hybrid trials or be a relevant market standard.
- Irrigated and dryland trials are conducted on multiple cropping systems over multiple locations to increase the reliability of results.
- Seed companies are granted the discretion to enter their best adapted hybrids and genetic traits; this helps to create an elite group of hybrids for evaluation.

ECONOMIC IMPACTS

- Data from the 2023 trials (for crops planted in 2024) showed that the best corn hybrids improved yields by **27 bushels per acre**.
- Given a 90% adoption rate, Mississippi corn producers could see an increase in revenue of **\$46.4 million**.
- We estimate that this revenue increase could result in **443 jobs** earning **\$16.6 million**, generate **\$22.9 million** in value-added, and result in **\$88.3 million** in output.
- Estimates also include potential increases in local household tax revenues of **\$17,069**; **\$371,791** in state household tax revenues; and **\$3.7 million** in total federal taxes.
- Increases in tax revenues are based solely on increased output by producers, with no increase in tax rates or change in the current tax structure.



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TAKING CARE OF WHAT MATTERS