



## Mississippi Corn Promotion Board 2022 Progress Report

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### Project

Title: Standardization of Mississippi Corn Hybrid Trials

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### Project Summary (Issue/Response)

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The 2022 Mississippi Corn for Grain Hybrid trials consisted of a total of sixty-two entries. These hybrids were supplied by fourteen participating companies or groups. These hybrids were grown in both irrigated and non-irrigated environments at multiple locations throughout the state. Each participating company was given the opportunity to submit their hybrid in either the irrigated test, non-irrigated test or both. During the 2022 season, the irrigated tests consisted of 62 of the 62 total hybrids. While the non-irrigated locations were made up of 45 hybrids from the total 62 entered in the Mississippi State Corn for Grain Hybrid OVT.

The 2022 growing season started off wet and planting was delayed at some locations due to these wet conditions. At most locations, conditions at the time of planting were ideal, allowing for all plots to emerge and get up and going quickly. A couple of locations experienced some extreme drought conditions during mid-summer. Overall, however, the 2022 growing season was favorable for corn production. Thanks to a very dry fall, harvest was completed without delays due to weather or equipment and on average, good yields were observed in 2022.



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### Project Results/Outcomes

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The 2022 Corn for Grain Hybrid Trials were divided into irrigated and a non-irrigated tests. The irrigated corn locations consisted of 62 corn hybrid entries that were evaluated for their yield potential within six different environments throughout the state. The mean yields for these four locations ranged between 155.2 to 245.5 bushels per acre. The mean yield across all six locations for the irrigated trials was 218.0 bushels per acre. The irrigated corn hybrid trials have traditionally all been located in the delta region of the state; however, one of the irrigated locations was positioned in the Black Belt region of the state, near Macon, MS.

The non-irrigated locations consisted of 45 corn hybrid entries that were evaluated for their yield potential within five different environments throughout the state, 4 locations in the Hills and 1 Delta location. The mean yields for the six non-irrigated locations ranged between 118.4 to 183.8 bushels per acre. The mean yield across all four of these non-irrigated locations was 167.5 bushels per acre.

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## Project Results

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Aberdeen hills (clay)	Brooksville hills (clay)	Crystal Springs hills (clay)	Stoneville delta (loam)	Verona hills (clay)	Overall average
<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>
140.4	118.4	220.7	183.8	174.1	167.5

Lake Cormorant delta (loam)	Macon hills (clay)	Minter City delta (loam)	Rolling Fork delta (loam)	Stoneville delta (loam)	Stoneville delta (clay)	Overall average
<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>	<i>bu/A</i>
152.2	229.3	215.6	243.5	222.0	245.5	218.0



2022 Corn OVT harvest

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## Project Impacts/Benefits

The overall goal of this project was to evaluate a large number of corn hybrids across multiple environments and cultural practices, both irrigated and non-irrigated, to determine which ones have the greatest yield potential within the state of Mississippi. The benefit of these hybrid trials is to allow the producer to be able to view unbiased yield data of these various corn hybrids, supplied by multiple seed company participants. The results of these yield trials can have a tremendous impact on a producer's decision of which hybrids are best suited for his area of the state and/or particular soil type. Evaluating these trials, grown under both irrigated and non-irrigated conditions, allows one to examine this data and then make management decisions about which hybrids might have the best potential to perform well when soil moisture is limited.

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## Project Deliverables

The Mississippi Corn Hybrid for Grain publication is available annually in a printed copy or it may be downloaded from the MSU Variety testing website at [mafes.msstate.edu/variety-trials](http://mafes.msstate.edu/variety-trials).