

Mississippi Corn Promotion Board 2019 Progress Report

Project Title:	Evaluation of Insecticidal Seed Treatments in Field Corn
PI:	Dr. Angus Catchot, Dr. Don Cook, Dr. Whitney Crow
Department:	Biochemistry, Molecular Biology, Entomology, and Plant Pathology

Project Summary (Issue/Response)



Neonicotinoid seed treatments have come under tremendous scrutiny in the last several years due their potential link to pollinator decline. Mississippi State University has been a leader in developing and maintaining yield benefit data with new and current insecticide seed treatment options in corn. It is critical that MSU continues to research benefits now and in the future to provide to EPA when such products come under Federal review for reregistration. The benefits to corn producers are clear but NGO's and Federal organizations will require large university data sets to clearly show the benefits of these practices. With funding from the Mississippi Corn Promotion board, MSU can develop and maintain pertinent data on the value of these technologies to the Mississippi corn producers in both the Hills and Delta region of the state. This data will be used in a meta-analysis to provide benefits/risk assessments to the EPA when neonicotinoids come up for reregistration.



Project Results/Outcomes

Severity of below ground pest depends greatly on year. Fig 1 shows substantial yield loss from southern corn rootworm in Starkville, MS in 2019. Fig 2 indicates slight advantage of seed treatemnts in Stoneville of 2019.

Project Results

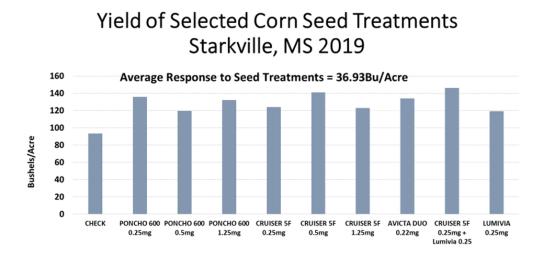


Figure 1 to the left

Yield of Selected Corn Seed Treatments Stoneville, MS 2019

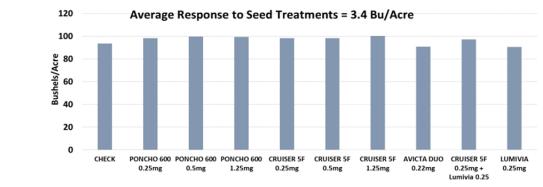


Figure 2 to the right

Project Impacts/Benefits

Data demonstrates on an annual basis the value of various seed treatments and rates utilized in Mississippi corn production systems. Data incorporates new products that have limited university testing as they become available so growers of MS can make data driven decisions on which products to choose on their farm.

Project Deliverables

Data presented at numerous grower meeting and workshops across the state, regionally, and nationally.



