

Subcontractor Quarterly Report

Project Number:	1920-172-0124
Project Title:	Enhanced Pest Control Systems for Mid-South Soybean Production
Organization:	LSU AgCenter
Principal Investigator Name:	Trey Price
Report Period:	1 st Quarter 2019

Project Status: Active

Louisiana Price: In 2018, we had a total of 15 locations for the 45-entry trial: LA (4), AR (5), MS (2), MO (1), TN (1), TX (1), and AL (1). Cercospora leaf blight developed at all locations, and all locations were successful. Data have identified at least 7 PIs with CLB resistance. We also have identified commercial sources of resistance to CLB. Since Dr. Mozzoni dropped off the project, PI seed were not increased for the 2019 season. An oversight on my part as a pathologist without a breeder's mindset. Dr. Ward has narrowed the PI list down to around 50. Dr. Rupe saved seed, I have ordered as many entries as available, and Blair plans to order PIs as well. Seed increases will be conducted during 2019 season. A 30-50 entry trial with breeder selections will be conducted during 2019 at all locations. **Ward:** Final analyses are being conducted on commercial variety and breeding line trials. Results are being written up for publication. This will allow breeding programs to move into the next stage of crossing and screening for resistance. Commercial variety trials will be repeated, but current results will give good information for growers to select resistance. Further large data sets are being compiled and analyzed investigating CLB vs PSS symptomology and fungicide efficacy, which will give insight into symptom relationships and identify the best management methods for the disease. Isolate collections have been fully backed up, with DNA extracted. The extractions are currently being run through PCR for population screening purposes and for fungicide resistances, which can be detected via molecular markers. **Padgett:** Report attached. **Davis:** No report received. **Buckley:** No report received.

Alabama Sikora: No report received.

Arkansas Spurlock: Lengthy report attached.

Mississippi Allen: Report attached.

Missouri Chen: Lengthy report attached.

Tennessee Kelly: No report received.

Texas Zhou: No report received.