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| Please use this form to clearly and concisely report on project progress. The information included should reflect quantifiable results that can be used to evaluate and measure project success. Comments should be limited to the designated boxes. Technical reports, no longer than 4 pages, may be attached to this summary report. | |
| Project Number: | 1720-172-0122 |
| Project Title: | Effects of the Introduction of Feed Grains into Mid-South Soybean Production Systems |
| Organization: | Mississippi State University |
| Principal Investigator Name: | Dr. John Orlowski |
| Report Period: | July-September 2017 |
| Project Status: Ongoing | |
| **Mississippi**  **Stoneville**  Corn plots were harvested on August 24th. Soybean and grain sorghum are maturing and will be ready for harvest in the coming weeks. Wheat seed has been acquired and will be distributed to cooperators.  Soil samples were completed by the LSU lab for the 2016 growing season. Dr. Kaur is currently conducting analysis on the soil test values and is developing partial budget analysis to determine rotational profitability.  Our summer researchers meeting was held in Gillette, AR in August. We discussed issues related to the project and made plans for the completion of the project in 2017 and plans for 2018.  **Brooksville**  On July 20th, 2017 irrigated treatments received an irrigation event.  August 1, 2017 sorghum plots had Sivanto applied at 6 fl oz/ ac in order to control sugar cane aphids.  A second irrigation event occurred to irrigation treatments on August 2, 2017.  On August 21st, all corn plots were harvested in the study.  Additionally, an application of acephate (3/4 pound / ac), bifenthen (6.4 fl oz /ac), and besiege (7 fl oz/ ac) were applied to soybean plots for insect control.  **Louisiana**  Corn and grain sorghum has been harvested. Soybeans will be harvested this week. Once harvested soil samples will be collected and residue management treatments applied. Data will be compiled as soon as possible.  **Missouri**  The Missouri milo plots were harvested on August 30 and corn was harvested on September 6.  Grain sorghum yields were reduced from bird damage averaging 4800 lb/acre.  Corn yield averaged around 200 bu/acre.  The highest yielding plot was 240 bu/acre.  Upper soybean leaves in plots show signs of dicamba injury but plants are green and healthy otherwise.  **Texas**  Grain sorghum was harvested August 1 and corn was harvested August 2 at College Station this year. We averaged 93 bu/a with the sorghum and 178 bu/a with the corn. Looking briefly at treatments, the dryland yielded 13 bu/a more than the irrigated for some reason. Test weight was also 1.6 lb/bu better on dryland. Burning did not seem to make a difference on the irrigated plots, but there may be a significant bump on the dryland plots (13 bu/a better with burning). The whole trial was fenced off mid-season and kept most of the pigs out. Plots had some minor damage, but nothing like last year. We had better weed control also this year. We did not see any substantial bird damage on our grain sorghum either.  After a promising start, the soybeans turned out terrible again this year. Yield will be measured in pounds instead of bushels per acre (if we harvest at all….probably not worth it). Lots of pods, but they are all flat and what little seed we have is rotting. See attached photos. Granted, the plots had water 18” up the stalk due to 20” of rain from Hurricane Harvey, but they were not looking good even before that. We will likely desiccate soybeans and weeds in all plots next week, followed by soil sampling and then burning. I have attached the raw corn and sorghum data from 2017.  Soybeans were sprayed with Declare on July 6 and irrigated (0.78”) on July 7, 18, and 28. Nematode samples were collected on corn and sorghum August 15.  **Arkansas**  Corn and grain sorghum have been harvested at the Newport and Pine Tree location.   Soybean treatments at both locations are R1-6.5.  No major pest issues with soybean at either locations. We also have the wheat seed here at Lonoke. | |