

2007 SOYBEAN BOARD PROPOSAL

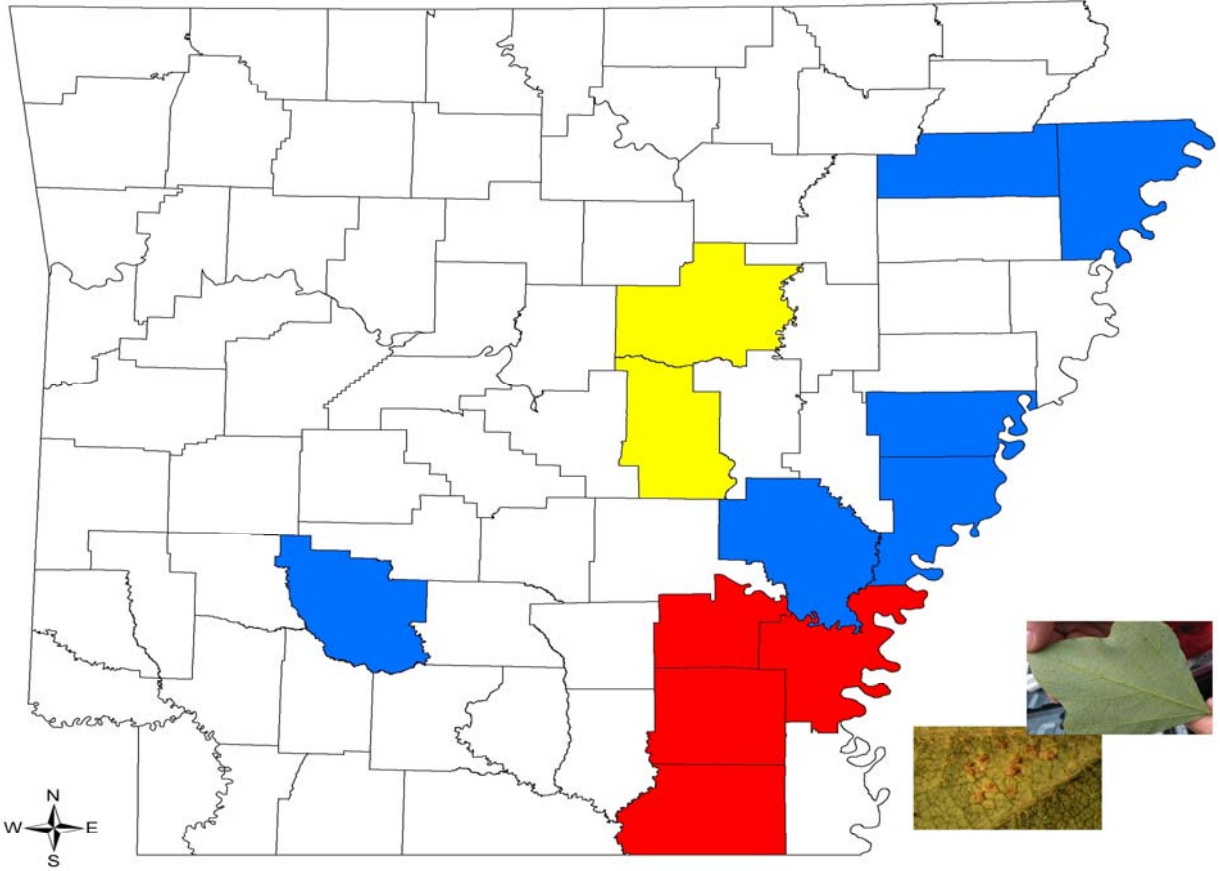
- Title:** State-Wide Monitoring of Soybean Rust and Other Diseases
- Investigators:** Scott Monfort and Jeremy Ross
- Cooperators:** Amy Carroll, Rick Cartwright, Cliff Coker, Dwayne Beaty, Kim Hurst, Terry Kirkpatrick, John Rupe, Sherrie Smith, Trey Reaper, Michael Emerson

The Soybean Rust Monitoring Program proved to be an essential tool for Arkansas producers in making management decisions for soybean rust. To begin this season, soybean rust was found to be active in the Gulf States in early January and seemed to be moving north on Kudzu until the Big freeze in April. Arkansas and other soybean producing states caught a lucky break (only for SBR) when the Big freeze killed Kudzu and volunteer soybeans back to extreme Louisiana, Florida and Southern Texas. Without a living host, SBR development was slowed dramatically and did not start to buildup inoculum and move until May 11th from New Iberia, LA. This is the first report of rust this far west in 2007 since the freeze and it is 53 days ahead of last year's first find in Louisiana. The weather conditions in the Louisiana, Texas, and Parts of Arkansas at this time were ideal for this disease. The development and spread of SBR in June and July followed a large front from Western Louisiana and Texas up through Western Arkansas where SBR was confirmed in Little River County on July 23rd (~90 Days ahead of 2006). With the help of all members of the Soybean Rust working group, we were able to get the needed information to all county offices, producers, university administration and faculty, and respected media in a matter of a couple of hours allowing producers to apply fungicides before rust developed into a problem. The Soybean Rust Working Group continued to follow the development and spread of soybean rust throughout the rest of the season providing county agent and producers in high risk areas with the needed information and recommendations in order to make the most economical management decision regarding soybean rust. By the end of September, Soybean Rust had been confirmed in 33 counties. Fortunately, there were no significant yield impacts observed regarding soybean rust infection and development in Arkansas. This was largely due to the early identification and quick dissemination of alerts to county agents, producers, and consultants and the slow and late development of soybean rust as a result of the hot and dry conditions in August and September. Overall, the monitoring program and the soybean rust working group played a vital role in the management strategy for soybean rust limiting unnecessary fungicide applications. An estimated 200,000 acres (7% of total acreage) were sprayed with a fungicide for control of soybean rust.





Soybean Rust Monitoring Program Information

- There were a total of 784 samples submitted though the Lonoke Lab. This actually excludes some walk-in samples during the busy time, which roughly estimated was an additional 50-75 samples.
- A total of 33 counties were confirmed positive for rust in 2007.
- 3 classroom trainings and 2 field trainings for Agents, Consultants, and Producers were conducted in 2007

2007 Asian Soybean Rust Scouting Effort



Infection Dates for Kudzu

-  Confirmed October 2-9
-  Confirmed October 16-26
-  Samples collect, not confirmed
-  Scouted Not Confirmed