## Soybean Rust In Mississippi Did Not Hurt The Crop

MISSISSIPPI STATE, MISS.

ississippi soybean growers wrapped up another year's battle with soybean rust without yield losses to the disease, even though it was found in 79 of the state's 82 counties.

Tom Allen, an Extension plant pathologist at Mississippi State University's Delta Research and Extension Center in Stoneville, has been part of the team monitoring the disease since 2007. He announced Nov. 1 that soybean rust had been found in all counties except Hancock, Harrison and Stone counties in South Mississippi.

"We can safely say we escaped almost completely unscathed with regards to soybean rust for the soybean season," Allen said. "The crop is 95 percent to 98 percent harvested, and I don't think we lost a single bushel to soybean rust rust in 2008 than in 2007, but several other states had fewer instances of rust found this year than the previous year.

To date, soybean rust has appeared late enough in the season that the Extension Service has never suggested blanket fungicide applications across vast numbers of acres. In 2008, Extension experts suggested applying an appropriate fungicide in a few key locations with late-planted, post-flood soybeans infected with rust. This year a few producers decided on their own to spray certain fields with fungicide for the disease, but in most cases, the beans were well past the growth stages where rust could have impacted yields.

"This year was the first time we've ever found rust on soybeans younger than approximately R5.5 in Mississippi," Allen said. "This year we found rust on R3/R4 soybeans and on beans in



the V-stages. Soybeans are more tolerant to rust in the V-stages, but if there is a large amount of inoculum present in the area, beans can become infected."

This year was the first time rust was found on

Soybean rust appeared in 79 of the state's 82 counties in 2008, but it came late enough that it did not cause yield losses. This soybean leaf is infected with the rust virus. Photo by Jim Lytle

this year. That's four years in a row the state has had zero bushels lost due to soybean rust."

For the last four years, the U.S. Department of Agriculture, through the Risk Management Association, has provided funding to support the extensive, national scouting conducted for soybean rust. That funding runs out Dec. 31, and no other funding has yet been found to replace this program.

This year, the state had soybeans growing in 77 counties, and rust was found in 76 of these. Rust was found only on kudzu in three counties, and Hancock was the state's only soybeangrowing county where rust was not found. In all, more than 1,200 unique locations were scouted across all 82 counties.

"This is the highest number of positive counties we've had to date, and it is one county more than three times what we had in 2007," Allen said. "The question can be asked if there has been better scouting for rust or more rust, and I can safely say there is more rust out there."

Alabama, Louisiana, Arkansas and South Carolina each had more counties positive for commercial soybean fields before scouts detected it in sentinel plots. Part of this was because wet weather prevented sentinel plots from being planted as early as planned.

Trey Koger, Extension soybean specialist, said this year's later-planted soybean crop and cool, wet weather in August and early September provided good conditions for rust.

"We had quite a bit of rust in the state by the end of September and October," Koger said. "But because it developed late, the disease had no significant impact on the state's soybean crop."

There is no way to predict what will happen in 2009 based on what happened this year. Soybean rust cannot overwinter in Mississippi because cold weather kills kudzu, a rust host, and any stray soybeans left in the state. Each year, the disease must blow into the state on weather currents from more southern areas.

"Just because we have found soybean rust in a particular location, either a soybean field or kudzu patch, does not mean that it will be back in that location next season," Allen said.  $\Delta$