

2008 Battle Ready For Soybean Rust Invasion

MISSISSIPPI STATE, MISS.

Well before planting time, the fight against Asian soybean rust is already under way in Mississippi as sentinel plots are planted and genetic resistance to the disease is being developed.

Billy Moore, pathologist emeritus working parttime with the rust program for the Mississippi State University Extension Service, said Schillinger Seeds is developing resistance to soybean rust.

"In 2006, they had fantastic resistance," Moore said. "This past year, it looked very good again, and we think the resistance may hold up five or six years or longer under our conditions."

Moore said limited supplies of soybeans with genetic resistance to rust should be available by 2011.

In the meantime, what have become routine early warning efforts are again in progress across the state.

By late March, Extension professionals had planted 22 soybean sentinel plots. These small plots range from 15-50 feet wide and 100-200 feet long, and each is planted to soybeans from four maturity groups. They are scattered throughout the state from Alcorn and DeSoto counties in the north to George and Wilkinson counties in the south.

"We plant early so these soybeans in the sentinel plots will reach the most susceptible stage before the soybeans in commercial production reach that stage," Moore said.

Soybean rust was found in several sentinel plots in the state in 2007 and did move into some commercial fields before the production season was over. Soybean specialists kept close tabs on the rust invasion, the crop's maturity levels and weather conditions, and they made management recommendations based on these factors.

"States all around us were suggesting that their producers spray fungicides to combat the rust," Moore said. "Our weather in Mississippi

was not favorable for rust, so we suggested that most of our growers not spray."

Moore said hindsight showed the recommendations were right on target, and growers are "very satisfied" with how MSU handled the situation.

"We try to look at this thing as if we're spending our own money," Moore said. "With bean prices at \$13-\$14 a bushel, producers are more likely to go out and use fungicide even if it's not necessary. We're trying to get them to use it only if conditions are favorable for a rust infection."

Tom Allen, the Extension plant pathologist at the Delta Research and Extension Center in Stoneville, said producers planted about 300 percent more wheat acreage this winter than last.

"If soybean seeds are available, the vast majority of the wheat growers are going to put soybeans on those acres after wheat harvest," Allen said. "Those late-planted soybeans will be most susceptible to rust if it comes through here like it has in the past few years."

Allen said fungicide applications for rust cost about \$9-\$14 per acre per application. Last year, those producers who had to treat for rust needed only one application.

"We intend to stay more in touch than last year with our growers and all those in the soybean industry," Allen said. "There is active rust right now on kudzu in Florida, some in Louisiana and at least one spot in Alabama."

The Mississippi Soybean Promotion Board and BASF annually fund a toll-free soybean rust hotline for producers in Mississippi, Louisiana and Arkansas. Producers can call (866) 641-1847 to learn the latest information on rust and current management recommendations for each state. The hotline will be activated early in the 2008 production season.

"The hotline will be the main clearinghouse for accurate information on rust when it begins to be found in these three states," Allen said. Δ