Soybean Rust Confirmed in Alabama

Soybean rust has been found in Alabama for the first time this year. Dr. Edward Sikora, a plant pathologist with the Alabama Cooperative Extension System, says this is the first report of soybean rust outside of Florida and Georgia this year.

“The disease was detected in plants in soybean sentinel plots growing at the Gulf Coast Research and Extension Center in Fairhope,” said Sikora. Fairhope is in Baldwin County on the east side of Mobile Bay.

Dr. Arcenio Gutierrez-Estrada, a member of Sikora’s soybean rust surveillance team, spotted the suspect plants June 28 and collected samples from two plants showing symptoms of the disease in the sentinel plots. The disease was found on one plant already bearing full-size beans while the other plant was in the bloom stage.

Sikora says his colleague, Dr. Jackie Mullen, Extension plant pathologist, confirmed the disease as soybean rust by microscopic examination and by serological testing on June 29 at Auburn University.

“We found four soybean rust-like spores June 27 in a spore trap located near the sentinel plots,” says Sikora. “We felt after finding the spores that there was a greater chance of finding the disease in that area.” He says the traps had been set out the previous week.

Sikora says scientists hope the spore traps will provide an even earlier warning than the soybean sentinel plots.

“There are eight spore traps in the state,” he says. “Soybean rust-type spores have not been found as yet in the other seven spore traps established in the state. “

Funding for the spore trapping system is provided by Syngenta, an agribusiness.

“We do not know how far soybean rust has spread within the state,” Sikora adds. “We have not observed the disease in any of the other soybean or kudzu sentinel plots scouted this week.”

But he adds that the recent warm wet weather could foster soybean rust development. Moisture and temperatures in the 60 to 85 degree range are favorable for the rust pathogen to infect the plant.

The disease can cause devastating yield losses because of its potential to spread rapidly undetected.
“Waiting for the disease to show up in your field before initiating your spray program could result in significant yield losses,” said Sikora. “Once an epidemic reaches 10 percent severity, a fungicide application may not be of much benefit.”

“Growers should increase their scouting efforts and be aware of new outbreaks as they are reported,” he added. “Producers can get timely information on the disease from the USDA soybean rust Web page, www.sbrusa.net, or by calling the Auburn University Soybean Rust Hotline at (800) 774-2847.”

All commercial varieties of soybeans currently available are highly susceptible to the disease.

The first symptoms of rust are small brown to brick-red spots on the upper leaf surface. Eventually slightly raised pustules will form in the spots, primarily on the lower leaf surface. As pustules become numerous, leaves turn yellow and drop prematurely.

Soybean rust can be managed with the judicious use of fungicides. Fungicide applications can reduce yield loss, depending on the plant’s developmental stage, time when soybean rust is detected and fungicide application method.

Sikora says the timing of the first fungicide application is critical. Applications should begin at flowering when the threat of the disease is considered high for an area. Subsequent applications should be made 14 to 21 days apart, depending on the product used.

Soybean growers in south and central Alabama should strongly consider applying a tank mix or a premix of a strobilurin and triazole-type fungicide immediately if their crop is at bloom or at a later reproductive stage. The crop will need to be protected until beans reach full size.

Growers in north Alabama should also be ready to apply a strobilurin-type fungicide or a tank mix of a strobilurin and triazole depending on spread of the disease.