



The University of Georgia
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<http://www.griffin.uga.edu/caes/soybeans>

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LOOKING BACK AT SOYBEAN RUST IN THE 2005 SEASON (*Kemerait, Jost, and Sconyers*) Now that we have the soybean crop in Georgia harvested and out of the field, we can look back and try to assess the real importance of Asian soybean rust to producers in Georgia in 2005.

To begin, Asian soybean rust was widespread in Georgia. An initial find in late April on volunteer soybean plants in Seminole County did not seem to have any real impact on our crop. The major, sustained, epidemic was first detected in mid-July in southwest Georgia. The disease continued to spread across the state and by the end of the season had been found in counties bordering Florida, Alabama, South Carolina, and Tennessee. We were never able to find the disease on soybeans in Elbert, Madison, Morgan, or Hart Counties, but it was likely hidden there somewhere.

We don't know why rust did not become established earlier in the season, despite the movement of hurricanes and tropical storms out of Florida and the Caribbean. My personal belief is that the initial amount of spores being carried north to Georgia was quite low. The disease had to "percolate" for a while at low levels on kudzu and soybeans in Georgia before reaching some critical level.

The most dire predictions from Brazil have indicated that with the right environmental conditions, soybean rust can move 300 miles in a single day. This did not happen in Georgia in 2005. As a very rough estimate, based on the amount of time it took to detect rust in Tift County

and then in Oconee County just south of Athens, we guesstimate that soybean rust was moving north in the state at approximately 60 miles per week.

Asian soybean rust did not “explode” overnight in a field, though it may have looked that way some growers. Based on observation by Dr. Layla Sconyers, it could be a number of weeks between the time she first observed (using a microscope) the initial few rust pustules in a field and symptoms that would have been apparent from typical scouting with a hand lens.

We estimate that between 60% and 70% of the soybean acreage in the state was sprayed with a fungicide at least once to combat soybean rust. From field trials in Decatur, Tift, and Appling Counties, it appears that the R1 (bloom) growth stage was an appropriate time to begin a fungicide program IF there was indication from sentinel plots that soybean rust could be in the area. Delays in initiating fungicide applications led to reduced yields in several field trials.

Chlorothalonil was much less effective at controlling soybean rust than were other fungicides labeled for use against the disease. Unfortunately, we do not have sufficient data to say which fungicides were the “best”; however we did see benefits from triazoles, strobilurins, and triazole-strobilurin mixes.

We did see significant yield increase in some trials where we used fungicides. In Attapulgus, two applications of Folicur (4 fl oz/A) increased yield by 19 bu/A. In an on-farm trial in Appling County, two applications of Headline SBR increased the grower’s yield by 16 bu/A over the untreated check. From grower visits around the state, I am confident that some growers who did not use fungicides suffered significant yield losses, where as other growers in the general area who did treat were not affected.

One of the most dramatic lessons from our fungicide trials was that treated rows of soybeans were not affected by untreated, completely defoliated, rows next to them. Growers who treat their crop do not need to worry about the effect of neighboring fields that do not receive fungicides.

We don’t know how soybean rust will affect our soybean crop in 2006; however growers should expect the disease to be at least as bad as it was this past season. Although we do not expect soybean rust to survive the winter in Georgia due to freezing temperatures, we do expect it to continue to build in Florida. We know that it can survive on kudzu in that state during the winter. We also found Asian soybean rust on Florida beggarweed in Attapulgus this season, so the disease may also survive on this weed as well. There is no question that the disease will once again invade Georgia in 2006; the questions now are “How early and how much initial inoculum??” Stay tuned.....

PRESENTATIONS ON WEB (*Jost and Kemerait*) Several presentations have been made in the past month briefly outlining what we saw pertaining the control of soybean rust and yield reductions when the disease was present. In the next few days these presentations will be made available on the [UGA Soybean Web Page](#).

GA/FL SOYBEAN AND SMALL GRAIN EXPO (Jost) The EXPO will be held in Statesboro on February 2, 2006. Several presentations by University of Georgia and University of Florida specialists will be given on soybean economics and soybean rust. In addition industry personnel will be on hand to discuss various soybean fungicides.

Registration for this event begins at 9:30 am. For more information please contact Phil Jost at 912-681-5639.

SOYBEAN YIELD AND PRODUCTION EFFICIENCY CONTEST (Jost) (Repeat....)


According to the latest yield estimates Georgia soybean yields are projected to average 28 bu/A, which is down from 33 bu/A a couple months ago. Obviously the late season drought hurt beans more than cotton. However, there were some good yields realized across the state and I once again, request your help in documenting these growers' efforts. The efficiency portion of this contest takes on new importance as growers have made some "extra" inputs to battle rust. It will be interesting to compare last year's winner with the efficiency winner this year in light of these additional sprays. Please encourage successful soybean growers in your county to participate in this year's Soybean Production Efficiency Contest. This year's winners will receive cash awards, plaques, and the agent and grower will be recognized at the 2006 Small Grain/Soybean Expo to be held February, 2 in Statesboro.

Completed entry forms must be postmarked by December 16, 2005 and mailed to:

Dr. Philip Jost
PO Box 8112 GSU
Statesboro, GA 30460

Entry forms have been emailed previously. If you need another copy let me know.

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