

The University of Georgia Cooperative Extension Service College of Agricultural and Environmental Sciences



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http://www.griffin.uga.edu/caes/sovbeans

ASIAN SOYBEAN RUST ON THE MOVE......FINALLY (*Kemerait, Sconyers, Jost*) Despite predictions that Asian soybean rust would spread earlier and more quickly in Georgia this season than in 2005, the disease has remained relatively quiet through much of this growing season. As of August 16, 2006, Asian soybean rust has been detected in plots planted to soybeans on research farms in Tift County, Brooks County, and Decatur County. To date, Asian soybean rust has NOT been found in a commercial field of soybeans in our state. On August 21 soybean rust was found in sentinel plot in St. Matthews (Calhoun Co.), SC.

Because soybean rust was found to survive on limited amounts of kudzu growing in protected areas in south Georgia during the mild winter of 2005-2006, it was believed that the disease would likely spread more quickly this season. In fact, it is likely that the spread of Asian soybean rust in 2006 has been slower than in 2005. Based upon the current levels of rust in sentinel plots located in Decatur County and Tift County, it appears that our current level of rust is approximately 3-4 weeks behind where the disease was in 2005. It is generally believe that the severe drought and high temperatures that have occurred during April, May, June, and July have been largely responsible for the slow spread of the disease.

The recent diction of Asian soybean rust in a sentinel plot in Tifton and the observation that the disease is well-established in localized areas of a sentinel plot in Decatur County seem to indicate that the disease may begin to spread more rapidly in the future. This is especially likely because many areas in southwest Georgia have received frequent rainfall over the past several weeks, which will help to fuel the spread of the disease. Additionally, much of the commercial crop in Georgia has reached the reproductive growth stages and is more susceptible to the disease.

We predict that Asian soybean rust will be detected in additional sentinel plots over the next few weeks and will also begin to infect the commercial crop, especially in the southern part of the state. Because the commercial crop is now in reproductive growth and because weather patterns

are more favorable for infection and spread of the disease, growers in south Georgia are advised to take precautions to protect their crop with fungicides.

While we do not expect rust to immediately "explode" in commercial fields, the disease is very difficult to detect in its early stages of infection and it is very possible that the disease could develop to a critical level in a commercial field before it is ever detected. Growers are advised to carefully scout their fields, focusing on areas of the field where the moisture from dew or rainfall is expected to remain for longer periods of time, e.g. against tree lines on the eastern edge of the field. Suspicious symptoms in the field should be provided to the county agent for further diagnosis.

The best way to prevent the spread of the disease in a commercial field and to reduce the potential for significant yield losses is the timely application of a fungicide. Growers who believe that rust has not yet infected their field can effectively use many of our fungicides labeled for control, to include Quadris, Quilt, Stratego, Laredo, Domark, Folicur, Uppercut, Headline, and Headline SBR. Although chlorothalonil products are labeled for control of rust, they do not seem to be as effective as the other fungicides.

If rust is know to be in a field, or likely to be in a field, growers should use fungicides with protective and curative activity, such as Folicur, Uppercut, Domark, Laredo, or Headline SBR, for management of the disease. Once the incidence of the disease exceeds 5-10% (i.e. 5-10 leaves out of 100 leaves) in a field, it becomes nearly impossible to control the disease with any type of fungicides.

Growers in south Georgia are advised to initiate their fungicide program (assuming weather has been favorable for disease spread) when the crop in early reproductive (bloom through early pod set, R2-R3) growth stages. Remember, your first fungicide application is likely your most important application!

We believe that the soybean crop in a field should be protected from rust until the R6 (full-seed) growth stage. Growers should consider a second fungicide application two-to-three weeks after the first application if 1) weather conditions continue to be favorable for spread of rust and 2) the crop has not yet reached the R6 growth stage.

Edited by: Philip H. Jost, Extension Agronomist-Cotton & Soybeans

Contributions by:

My go

Philip H. Jost, Extension Agronomist-Cotton & Soybeans

Bob Kemerait, Extension Plant Pathologist

Layla Sconyers, Research Post-Doc, Plant Pathology

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