



PLANT DISEASE AND INSECT ADVISORY

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Soybean Rust Update #3 **John Damicone, Extension Plant Pathologist**



Soybean rust continues to be found in new areas in Oklahoma. The sentinel plots in Ottawa County near Afton were positive for rust for the first time last week. The maturity group (MG) 3.9 at R6 growth stage and MG 5.5 at R3 varieties each were positive at a low (1%) incidence. Rust continued to increase in the Atoka and Bryan County sentinel plots in southern OK. Rust was found again after a week's absence at Choctaw County, again at 2%. At Payne County, rust was not found this week in the MG 5.5 plot where rust had been previously found on MG 3.9 soybeans. The MG 3.9 plot was abandoned in Payne County because it has matured. In

Tulsa County, rust incidence remained low (2%) this week. Sentinel plots in Kay, Okmulgee, Sequoyah, and Washington Counties remained negative for rust this week. Samples taken from commercial fields in Noble Co. were also negative for rust this week.

Other diseases such as downy mildew, brown spot, bacterial blight, bacterial pustule, and frogeye leaf spot are widespread and continue to make rust recognition in the field difficult. It is nearly impossible to scout for rust in the field when it is present at low levels along with these other diseases which are often present at high levels. We are able to find rust by scanning 100 leaves per site under a dissecting scope at 10 to 50X.

The rains received last week improved soybean prospects in most areas of the state. While hot and dry weather is expected early this week, a mid week cool front is expected to lower night temperatures into the 60s. We normally get heavy dews when night temperatures are into the 60s this time of year which should be favorable for rust development.

Fungicide sprays are recommended to protect soybeans from rust in affected counties and adjacent counties when soybeans are in the R1 to R4 growth stages. The decision to spray at R5 is a judgment call. Fungicide application for rust control should be considered only where crop conditions and yield prospects are good. Fungicide application to drought stressed soybeans and those with low yield potential is not likely to be productive.

Except for the sentinel plots in Bryan and Atoka counties, rust is increasing slowly if at all in areas where it has been found. I am assuming that spore levels are low and hot weather during August has contributed to this slow disease development. For this reason, growers considering fungicide application to control rust should consider waiting until R3 or even R4 before making an application. This should permit growers to get by with a single application.

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