

11/19/2007 University of Missouri Extension Agronomy Update  
**Evaluation of Current Wheat Stands & Soybean Rust Summary for 2007**  
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Wheat producers are encouraged to evaluate their current stands, as wheat throughout west central and central Missouri is being reported as discolored and with stagnated growth. Barley yellow dwarf virus, which is transmitted by aphid species, is suspected in numerous fields. However, normally, the leaf purpling associated with barley yellow dwarf virus does not show until the spring, during the boot stage of growth.

Aphids transmit the virus to wheat as they feed. After a killing freeze, many aphids die and feeding drops off drastically (and therefore, transmittance of the barley yellow dwarf virus is decreased). However, once infected by this virus, wheat remains infected. Fields in which barley yellow dwarf infection is suspected should be confirmed, by submitting plant samples to the University of Missouri Extension Diagnostic Lab for viral screening. For submitting wheat samples to the MU Diagnostic Lab, please see the following website:  
<http://soilplantlab.missouri.edu/plant/> or call 573/882-3019.

Secondly, growers have questioned how widespread soybean rust was in 2007 and if it will affect management decisions in 2008. Soybean rust was confirmed throughout northwest, west central, and central Missouri in 2007, with confirmations on both soybean and kudzu in Ray County. In total, Dr. Laura Sweets (MU Extension Plant Pathologist) reported 37 counties in Missouri positive for soybean rust this season. Sampling for the soybean disease has ceased, due to the freezing temperatures.

Soybean rust cannot overwinter in this region of the Midwest and therefore, the positive confirmations in Missouri for 2007 will not increase our risk for soybean rust in 2008. With that said, the numerous confirmations in Missouri do indicate the potential for development of soybean rust in this area, should the disease and adequate rain be present during the July-September timeframe. In 2007, this region of Missouri was simply too dry for soybean rust to develop before October. This will not necessarily be the case in other years and environments.