Scouting And Sampling Frogeye Leaf Spot In Soybeans

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The rain that most of Tennessee has been receiving benefits not only soybeans but also soybean diseases and in particular, frogeye leaf spot. This disease has become more concerning with strains of the pathogen (Cercospora sojina) developing resistance to fungicides in the strobilurin (quinone outside inhibitor – QoI) fungicide group.

To better understand the pathogen population and assess the risk of developing fungicide resistance, frogeye leaf spot samples will be collected in Tennessee. Producers in Tennessee are encouraged to contribute to this effort by mailing in soybean leaves with frogeye leaf spot symptoms along with information provided on the 'Frogeye Leaf Spot Sample' sheet. This document also contains information on sampling, storing, and mailing the samples. Samples will be tested, free of charge, for strobilurin/QoI fungicide resistance and results will be emailed to producers.

When collecting infected leaves, try to sample across the field/infected area to get a representative sample. Frogeye leaf spot lesions are angular or circular spots up to 5 mm in diameter with light grey centers and distinct purple to red-brown margins. The leaf spots can be single or coalesce to form larger lesions with irregular margins. Dark areas within lesions on the underside of leaves are clusters of spores (sporulating lesions).

Spores from lesions will be tested to determine the proportion of the population that may be resistant to strobilurin/QoI fungicides and will be added to a Tennessee collection of isolates that will be analyzed molecularly to better understand the population diversity in Tennessee. More information about the disease can be found at UTcrops.com (Frogeye Leaf Spot Information and previous article on soybean diseases). If you have any questions contact Heather Kelly (731-425-4713 or youngkelly@utk.edu). Δ

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