

Frogeye Concerns

Strobilurin Resistance Spurs Advice On Alternative Treatments

BETTY VALLE GEGG-NAEGER

MidAmerica Farmer Grower

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Fungicide resistance and the pathogen that causes frogeye leaf spot of soybean was a topic on the mind recently of Dr. Carl Bradley, plant pathologist with the University of Illinois. The name of that pathogen is *Cercospora sojina*.

“Since 2010 we’ve been finding strains of that fungus that are resistant to strobilurin fungicides,” he said. “Strobilurin fungicides are active ingredients in Headline, Quadris and Evito.”

The resistant strains have been found in western Tennessee, southeastern Illinois, western Kentucky, southeastern Missouri, as well as a couple of parishes in Louisiana. Bradley offered a few suggestions on what to do and how to manage this disease in light of these new strains.

“The good news is you can manage frogeye leaf spot by choosing a variety that has a good level of resistance to that disease; that way you start off not having to worry about the fungicide component,” Bradley suggested. “However, if you are growing susceptible varieties and you notice that you are having a frogeye problem in those soybeans you can look at other chemistry classes. Our research has shown that some of the fungicides in the triazole chemistry class as well as Topsin, which is in another fungicide class, known as the benzimidazoles, work well.”

Bradley urges farmers to use the resistant varieties or some other chemistry classes to mix with strobilurin fungicides to control this disease.

“The take home message is that resistant varieties, crop rotation and good cultural practices are all needed, along with fungicides to manage this disease,” he said. “If you are growing a susceptible variety, look at other chemistry classes or mixtures of chemistry classes; and then the



Dr. Carl Bradley, plant pathologist with the University of Illinois discusses frogeye leaf spot of soybean and the pathogen that causes it.

Photo by John LaRose Jr.

third part is to use fungicides to control the diseases, that’s really why they were developed.

“Any time we spray a fungicide we are applying selection pressure on that pathogen and may be selecting out individuals that have resistance to fungicide so we really want to be focusing on diseases when we make a fungicide application,” Bradley added. “Look at risk of disease as well as your scouting observations to make a decision on whether you need to spray or not.”

BETTY VALLE GEGG-NAEGER: Senior Staff Writer, MidAmerica Farmer Grower