**Frogeye Leaf Spot Alert**

**Frog eye leaf spot (FLS)** has been observed in numerous field in central and North Alabama in recent days. The disease is caused by the fungus *Cercospora sojina* and can infect leaves, stems and pods of soybeans. FLS development is favored by warm, humid conditions and frequent rain events; conditions we have experienced in Alabama during July.

**Leaf symptoms** begin as small, circular-to-angular spots on the upper leaf surface, typically with dark brown centers surrounded by a reddish-brown margin. In time the center of the spot takes on a gray to light brown color but the border remains dark. Lesions may eventually merge to form larger irregular lesions on the infected leaves which can become ragged in appearance. Heavily infected leaves may drop prematurely.

**Stem lesions** are reddish brown with a narrow, dark margin and the centers of the lesions become brown to gray with age. Lesions on pods are circular to-elongated and may appear slightly sunken and lighter colored in the center. The pathogen can also invade the pod an infect seeds which may become discolored and/or cracked.

Yield losses depend on disease severity and varietal susceptibility. Losses have been reported of up to 30% in severely damaged fields. Minor damage to resistant varieties likely will not cause economic damage.

**FLS Management right NOW**

Survey results from Alabama in recent years showed that strobilurin-resistant strains of FLS were detected in soybean fields in Cullman, Escambia, Limestone, Morgan and Pickens counties. We strongly suspect that resistant strains of the pathogen are present in other regions of the state. This suggests that applying a strobilurin fungicide alone may not be effective in controlling the disease when used on FLS-susceptible or moderately tolerant varieties.

With this in mind we suggest using a pre-mix or tank mix of fungicides that provide a dual mode of action such as a strobilurin + triazole or strobilurin + carboximide when treating varieties that are susceptible or moderately tolerant to FLS.

For best results a fungicide should be applied before FLS is observed in the field. Typically an application at the R3-to-R4 growth stage would be adequate, but this year the disease appears to be beginning earlier in fields due to favorable weather conditions. Delaying sprays until after the disease is widespread in a field may not result in an economic benefit from the fungicide application.
Frog eye leaf spot (FLS) on soybeans