

Sudden Death Syndrome A Risk When Planting Soybeans Early Into Cool Soils

URBANA, ILL.

Sudden death syndrome (SDS) caused by the fungus *Fusarium virguliforme* has plagued soybean growers in Illinois since the 1980s according to University of Illinois plant pathologist Carl Bradley.

In Illinois, the disease first appeared in the southern part of the state but has since spread across the entire state. The fungus infects soybean roots very soon after planting.

The typical SDS symptoms occur on the leaves, generally when the plants are flowering. The symptoms are caused by a toxin produced by the fungus in the roots that moves through the plant up to the leaves.

The first signs of the disease are yellow splotches on the leaves that develop into interveinal chlorosis (yellow leaf tissue between veins that remain green) and then interveinal necrosis (dead leaf tissue between veins that remain green). The fungus also can cause root rot.

SDS does the most damage to susceptible soybean varieties that are planted into cool soils, particularly when there is frequent rainfall after planting. With the early start on corn planting and mild spring weather this year, much of the corn has been planted, and some farmers have

begun and many others soon will begin planting soybeans.

“When planting soybeans early during a time when soil temperatures are still relatively cool, farmers should consider the risk of SDS,” said Bradley.

“In fields where SDS has been a historical problem, it is best to plant soybean varieties that have a high level of resistance to SDS. In addition, consider planting these fields with a history of SDS last,” he advised.

Most seed companies provide ratings for SDS resistance. The U of I and Southern Illinois University have also screened some varieties for resistance to SDS. The results from these university research trials are available at www.vipsoybeans.org and www.scnresearch.info.

No in-season options are available for SDS management, and currently-registered fungicide seed treatments are not effective in preventing development of SDS. Thus, it is important that the most resistant varieties are planted when the conditions favor SDS.

For more information on SDS, go to the Plant Health Initiative website (www.planthealth.info).

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