

Soybean Sudden Death Syndrome

The onset of soybean Sudden Death Syndrome (SDS) the last two weeks raises questions about what might be done to reduce future issues. In most cases, it's not all that straightforward.

SDS is a soil borne fungus preferring a) the presence of the fungus in the soil and b) wet conditions during the early to mid-reproductive stages. If both of those boxes are checked, the result tends to be yellowing plants that drop leaves, resulting in reduced flowering and pods that may abort or fail to fill completely – often dependent upon when the onset of disease occurs.

Effective management requires an integrated approach. Very few soybean varieties have excellent SDS resistance, but some have higher than average ratings and should be considered where SDS has been a past issue. Delayed planting may be an option since SDS tends to be worse when soybeans are planted early into cool/wet conditions. It is not a good option if delaying planting results in yield reductions. Compaction can increase the incidence of the disease, so checking for compaction issues in field areas with the disease is a good idea.

SDS is often associated with soybean cyst nematode (SCN). Recent research suggests a synergistic effect from the presence of both diseases, even as the presence of SDS is not always a predictor of SCN levels (SCN is still a huge soybean yield robber and *should* be a management consideration for soybean producers). Rotation out of soybeans can help, but the SDS fungus has a great ability to survive on non-soybean crop residue until soybeans return.

Seed treatment research near Topeka in both SCN and SDS by K-State Research & Extension Kansas River Valley (KRV) Experiment Field Agronomist in Charge Eric Adey found good responses from a couple different active ingredients to combat SDS. You can find the full results at:

<https://newprairiepress.org/kaesrr/vol6/iss5/16/> .

In many cases, reproductive stage moisture is going to dictate SDS levels, so it may not be an issue with the same variety on the same field in a different year. Even so, now is a great time to evaluate fields for the presence of SDS to fine tune management in the future.