

INTEGRATED MANAGEMENT OF SOYBEAN SUDDEN DEATH SYNDROME

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Sudden death syndrome (SDS) was severe in many fields across the Midwest the past few years, resulting in yield loss and frustration for farmers. There are a few positive things that we can learn in a years like this, though. For one, many soybean varieties were pushed to their limits, allowing farmers to get a really good evaluation of the genetic resistance for SDS in a variety. Additionally, other beneficial management strategies can be identified that complement variety resistance.

This talk will highlight some of the SDS management research completed over the past several years by plant pathologists at Iowa State University and in neighboring states. Much of this research is funded through the soybean check off from Iowa Soybean Association, the North Central Soybean Research Program, and the United Soybean Board. We thank all of our sponsors for this research.

One research focus has been the evaluation of seed treatments that include SDS on their label. While the foundational management strategy for SDS is using resistant varieties, in years when environmental conditions are favorable for disease development, it is evident that resistance alone does not provide adequate control or reduce farmer risk sufficiently. An effort to combat SDS in fields is ILeVO®, a new seed treatment by Bayer CropScience. We evaluated ILeVO® in many environments including fields with different disease levels and planting dates. The main conclusion was that ILeVO® seed treatment was effective at reducing SDS severity levels in many different environments compared to control plots.

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