Preparing ND for Soybean Sudden Death Syndrome

The Situation
Sudden Death Syndrome (SDS) of soybean causes millions of dollars in yield loss in U.S. soybean production annually. Although not yet reported in North Dakota, the invasive soil-borne pathogen causing SDS is likely to be identified in North Dakota soon. Management tools for the disease exist, but the vast majority of growers, County Extension agents, crop consultants and other agriculture professionals have never seen SDS and are not prepared to identify or manage the disease.

Extension Response
In order to help growers identify and manage this disease, a ‘critical mass’ of 27 agriculture professionals in Eastern North Dakota traveled to the University of Minnesota’s Rosemount Research and Outreach Center to attend a short-course on SDS. The effort was supported by the North Dakota Soybean Council and designed by NDSU and the University of Minnesota.

Impacts
Participants reported that their level of knowledge in all key areas of SDS has gone from ‘low’ to ‘high’ after the course.

Economic Impact: The 27 participants reported that they scouted or provided management information for approximately 434,000 soybean acres, and estimated that 12% of those acres (52,080 acres) would experience yield loss from SDS in the next five years. If this short course prevented even 5% yield loss on those acres, the value of the course would be $1,041,600 (assuming an average yield of 40 bu/a and an average price of $10 / bu on 52,080 acres).

Public Value Statement
Protecting North Dakota’s soybean crop from yield loss caused by invasive pathogens keeps more revenue in the grower’s hands, which contributes to our local economy and helps feed the world.

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