

## Key Highlights

### Thermal Imagery Insights

Identified hot spots associated with sudden death syndrome, guiding in-field scouting.

### Team Engagement

Demonstrated the app's value to the grower's extended support team, building confidence in the program.

### Future-Focused Decisions

Led to proactive planning for seed treatments and resistant varieties to protect soybean yield potential.

## Disease

# Using Horizons to Identify and Manage Sudden Death Risk in Soybeans

By:  Horizons Team

## Background

A grower in southeast Missouri working with one of our retail partners is in his first year using Horizons and has already become one of the most active participants in the program. His fields, located near the Mississippi River and its tributaries, often experience flooding, which increases the risk of diseases like sudden death syndrome (SDS). Planting conditions across southern Illinois and Missouri this season were far from ideal, with many growers facing challenges from excess moisture. In this case, a couple of his fields were flooded shortly after planting, creating conditions that likely contributed to SDS development.

## Challenge

The issue quickly escalated into a larger, multiple-field concern. After checking fields with imagery, the team also inspected one not enrolled in the program and found even more SDS. This confirmed the disease pressure extended beyond isolated areas. While little could be done mid-season to correct the problem, the long-term impact could be severe if left unmanaged, leading to significant yield loss. The key decision became how to mitigate SDS risk going forward.



For validation, the team used Horizons' thermal imagery to detect potential disease hot spots, cross-referencing them with color imagery and historical flights. Areas showing higher thermal readings aligned with disease presence, helping prioritize in-field scouting efforts. While the grower himself was not present during the field visit, his consistent engagement in the Horizons app showed his commitment, and the demonstration helped his salesperson, field hand, and brother better understand the program's value.

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## Solution

With Horizons, the grower and his crop specialist were able to pinpoint fields affected by SDS and validate the imagery with on-the-ground scouting. Thermal layers clearly identified areas under disease stress, allowing targeted inspections that confirmed the presence of sudden death. Based on this insight, the decision was made to adjust management strategies across the entire operation by considering more resistant soybean varieties and seed treatments specifically designed to protect against SDS in future seasons.

## Results

The grower and crop specialist agreed on a proactive plan: implement resistant varieties and stronger seed treatment packages to protect against SDS moving forward. Horizons played a pivotal role in identifying disease early, validating the problem, and supporting confident decision-making for next year's crop. While this season's losses could not be reversed, the grower gained valuable insight into the tools needed to prevent future yield loss and improve ROI. The season also reinforced the importance of imagery in engaging the whole farm team in identifying and addressing field challenges.