

Tar Spot in Corn: 2025 Weather Raises the Stakes

What is Tar Spot?

Tar spot is a rapidly spreading corn disease caused by the fungus *Phyllachora maydis*. It presents as small, raised black spots that do not rub off and can severely limit photosynthetic activity, leading to premature dry-down and yield loss. It overwinters in infected corn residue, making it a persistent threat year over year—especially in no-till or corn-on-corn systems.

2025 Weather: A Perfect Setup

This year's weather is shaping up to be ideal for early-season tar spot development. Moderate night temperatures in the 60s and consistent dew formation across much of the Midwest have already triggered early detection in key states. While higher day temps in July may help slow disease progression, the risk is far from gone—especially in areas that continue to receive frequent rainfall and heavy morning fog.

Field Reports Confirm Early Onset

Tar spot has already been confirmed in several Midwest locations, including Indiana, Iowa, Illinois, and southern Wisconsin. Many of these fields had a history of tar spot, and early infection is being observed well before tassel. This suggests that inoculum levels remain high and the disease cycle is starting sooner than usual in 2025.

Managing Tar Spot in 2025

With favorable weather conditions in place, a proactive approach is essential.

1. **Scout Early and Often:** Focus on low-lying areas or fields with a tar spot history. Look for tiny, black, raised spots that cannot be wiped off and often appear first on lower leaves.
2. **Monitor Forecast-Based Risk Tools:** New forecasting models are available that use real-time local weather to predict tar spot risk. These tools help identify the best timing for fungicide applications and flag high-risk fields before visual symptoms explode.
3. **Apply Fungicides at the Right Time:** VT-R3 growth window remains the sweet spot for fungicide efficacy against tar spot. Applications outside this window—especially too early—may miss the disease onset and reduce ROI. If tar spot is already active and moving quickly, a slightly earlier application may still be warranted.

Final Thoughts

The 2025 season reminds us that tar spot is here to stay—and weather will always dictate its intensity. While we can't control the environment, we can manage risk through informed scouting, timely treatment, and smart hybrid selection. Stay alert, use available tools, and don't wait for visible symptoms to start making decisions. Your yield potential depends on it.

References:

- Crop Protection Network – *Tar Spot of Corn Resources*
- Corn ipmPIPE – *2025 National Tar Spot Risk Map*
- Iowa State University Extension – *Tar Spot in 2025: Why Early Season Monitoring Matters*



Center Point, IA 2024

Wildfire Haze is Impacting Corn and Soybeans

Across the Midwest, hazy skies have returned—an unwelcome repeat of 2023, when Canadian wildfires cast a smoky filter over much of our growing season. Now in 2025, we're facing another round of prolonged haze, and the question on every grower's mind is: what's this doing to the crop?

Reduced Solar Radiation Means Slower Photosynthesis

Corn and soybeans rely heavily on full sunlight to drive photosynthesis. When wildfire smoke lingers in the atmosphere, it reduces the amount of direct sunlight reaching the canopy. In 2023, research showed that photosynthetically active radiation dropped by 15–20% on smoky days. For corn approaching tasseling and soybeans entering flower set, that means less energy captured during some of the most critical stages of development.

It's Not Just About Light — Temperature and Transpiration Are Affected Too

Smoky conditions often bring slightly cooler daytime temperatures. While this might reduce heat stress, it also slows down transpiration—the plant's natural cooling and nutrient flow system. With lower transpiration rates, nutrient uptake can stall, and crop development may quietly fall behind. In 2023, this subtle stress didn't always show up in-season but often revealed itself later in the form of smaller ears or lower pod counts.

Corn: Smoke During Pollination Poses a Risk

Many corn fields across our footprint are in or near the VT to R1 stages right now. In 2023, university studies observed delays in tassel emergence and slightly compressed pollination windows when smoke persisted. While not catastrophic on its own, this can increase yield risk—especially if paired with other stressors like dry weather or disease pressure.

Soybeans: Watching Flower Retention and Pod Fill

Soybeans are more flexible, but they still need good light for strong flower set and pod retention. During extended smoke events in 2023, some fields reported reduced flower retention and fewer pods per node. In many cases, soybeans compensated later with branching or extended growth, but that depends heavily on late-season rainfall and temperature trends.

References:

- *Smoke and Its Effects on Crop Physiology (2023)*, Iowa State University Extension.
- USDA-ARS (2023). *Wildfire Smoke and Corn/Soybean Performance: Observations from 2023*.
- Purdue Agronomy Department (2023). *Smoky Skies and Crop Development: Impacts from Last Season's Wildfires*.



Randolph, WI 7/13/2025