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2025 Soybean Seedling and Stem Disease Survey

(Darcy Telenko)

Please help with this survey!

The Crop Protection Network (CPN) is a multi-state and international collaboration of Extension specialists and professionals, providing unbiased, research-based crop protection information. Our goal is to support professionals making informed decisions on soybean disease management.

This survey is being conducted to determine the effectiveness and value of soybean disease management information available on CPN. Your input is very valuable to us. Your participation is voluntary, and you can skip any question and exit the survey at any time. Your decision on whether or not to participate will not affect your affiliation with the Crop Protection Network. Please fill out the survey only if you are 18 years of age or older. Your response to the survey is anonymous which means no names, IP addresses, email addresses, or any other identifiable information will be collected with the survey responses. We will not know which responses are yours if you choose to participate.

https://app.smartsheet.com/b/form/d1f7a7a5060a4f578f04e1b16891c1b7



Why All The Fuss With The Plant Pathogen Fusarium Graminearum?

(Darcy Telenko) & (Martin Chilvers, Michigan State University)

Fusarium graminearum is a globally distributed plant pathogen capable of causing plant diseases, Fusarium head blight of wheat and small grains and Gibberella ear rot of corn are two diseases found in Indiana

that are caused by this plant pathogen. Under conditions that are favorable for disease, such as warm and wet conditions, the disease can significantly impact yield and grain quality. The fungus can produce toxins referred to as vomitoxin, that can induce vomiting. However, farmers actively manage diseases to reduce this threat, and harvested grain is routinely tested for the toxin. Indiana growers should review the article from last week on tips for scouting and things to consider for Fusarium head blight in wheat as our crop reaches maturity (https://extension.entm.purdue.edu/newsletters/pestandcrop/article/scouting-for-fusarium-head-blight-scab-of-wheat-and-things-to-consider-when-harvesting/).

Occasionally it is helpful to import strains of the fungus from other states or parts of the world to improve our understanding of the system and to further plant disease management. However, there are regulations and procedures in place that are managed by the Animal and Plant Health Inspection Service (APHIS) agency within the United States Department of Agriculture. Those procedures assess the potential threat of the import request and have strict protocols in place to prevent accidental release of potentially dangerous strains.

The recent media attention provides a valuable opportunity to highlight the ongoing efforts of our universities, government agencies, private industry and farmers who work collaboratively to protect our crops and ensure a safe, reliable food supply.

An excellent article with more detail on Fusarium graminearum is available here at the Crop Protection Network:

https://cropprotectionnetwork.org/publications/an-overview-of-fusarium-head-blight.

2025 Weed Science Field Day At TPAC

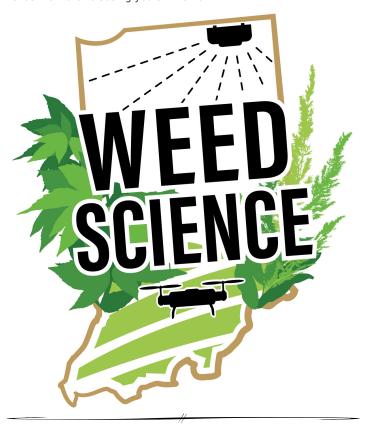
(Tommy Butts), (Bryan Young), (Bill Johnson) & (Julie Young)

Mark your calendars and come on out to join us for our annual Purdue Weed Science Field Day! The event will be held on *Thursday, June* **26**th **at the Throckmorton-Purdue Agricultural Center (TPAC)** located at 8343 South US-231, Lafayette, IN 47909.

The field day will start at 8:00 AM with walk-in registration, coffee, and donuts. At 8:30 AM, the event will begin with a brief poster session presented by the weed science graduate students before heading to the field research trials. As we view the field trials, we'll discuss weed control issues that have popped up from across Indiana in 2025, advancements in weed management technology, and provide research-supported management recommendations for some of Indiana's most problematic weeds. This is a great opportunity for networking with all our industry and academic representatives, as well as strengthening our weed management knowledge. Indiana CCH credits will also be available for a variety of categories.

For more information and to pre-register to attend, please visit our website here:

https://ag.purdue.edu/department/btny/weed-science-field-day.html. We look forward to seeing you on the 26th!



From South To North: Indiana's Corn Progress Update

(Jeferson Pimentel), (Dan Quinn), (Betsy Bower) & (Bruno Scheffer)

According to the USDA-NASS planting progress report released on **June 2, 2025**, **93%** of the U.S. corn crop has been planted, a notable increase from **87%** the previous week and matching the five-year average of **93%** (Figure 1). Continued favorable weather over the past few weeks has enabled farmers across many states to make rapid progress toward completion.

In Interactive Maps 1, you'll find updated planting progress across central corn-producing states. The Corn Belt is nearing the end of planting, with standout progress in states such as **Minnesota (99%)**, **lowa (97%)**, **Nebraska (98%)**, and **Missouri (97%)**, all of which are now ahead of their five-year averages. Even states that had been slightly behind are catching up fast.

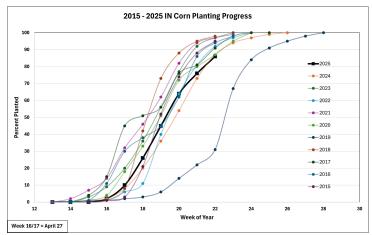


Figure 1. 2015-2025 Indiana corn planting progress by week (USDA-NASS)

Indiana has now reached 86% planted, up from 76% the previous week, nearly reaching its five-year average of 90%. The state made a solid 9-point gain this week, reflecting continued strong momentum. Some states, like Ohio (72%) and Pennsylvania (64%), remain behind historical norms due to earlier weather delays, while North Carolina (99%) and Texas (95%) are essentially complete. These numbers indicate that national planting progress is firmly back on track, with most regions either matching or exceeding seasonal expectations as we close out spring planting.

In addition to planting, corn emergence is advancing quickly, with **78%** of the crop emerged nationwide, up from **67%** last week, slightly ahead of both **2024's pace** (**72%**) and the five-year average (**77%**).

In the Corn Belt: Iowa (87%), Minnesota (87%), and Nebraska (90%) are significantly ahead of average. Indiana now reports 70% emergence, up from 57% last week and slightly above its five-year average of 73%. Ohio (49%) has improved substantially from last week's 36%, though it still trails the average. South Dakota (82%) is emerging rapidly, far ahead of its five-year average of 71%. These emergence rates suggest strong early-season development in much of the Corn Belt, although some states continue to feel the impact of earlier cooler or wetter conditions.

The USDA-NASS also released the **corn conditions report** of the season, showing that in **Indiana**, **60% of the corn crop is rated in good condition and 10% in excellent condition**. This early-season assessment indicates a promising start for Indiana's corn, especially considering recent gains in planting and emergence progress.

It's A Hazy Shade Of ... June

(Beth Hall)

Welcome to the start of Hurricane Season that runs from June through November each year. Why would Indiana care about hurricane season? Certainly, by the time any hurricane might impact the state, it will have been greatly downgraded to what is called an extratropical (i.e., poleward of the Tropic of Cancer (23.5° north latitude)) storm or the remnants of the hurricane. Regardless, these hurricane remnant storms can bring often-needed rainfall with enough moisture to potentially be drought busters.

While our first tropical storm of 2025 (would be named "Andrea") has yet to develop, forecasters are keeping an eye on strong wind patterns coming from western Africa and areas of low pressure that could strengthen to tropical storm levels (maximum sustained surface winds reaching 39-73 mph (34-63 knots)).

Speaking of those easterly winds coming from western Africa, another reason why Indiana may be interested in these and other tropical storm patterns is due to massive Saharan dust storms that can be carried thousands of miles across the Atlantic Ocean. There is currently a massive dust cloud, fed by the Sahara Desert and carried by the northeast trade winds, that is headed our way (Science Alert). AccuWeather provides a fun animation of the size and path of this dust storm that is currently impacting the Caribbean Sea and is projected to steer northward into the United States from the Gulf region (AccuWeather). Depending upon how far north this dust plume goes, we may see hazy skies that are likely to reduce the amount of solar radiation reaching our surface.

Smoke from Canadian wildfires is also creating hazy skies across Indiana. The National Oceanic and Atmospheric Administration (NOAA) provides an experimental smoke forecast product that predicts smoke intensity for the next 48 hours. The *New York Times* offered a color-shaded product of the NOAA tool, as shown in Figure 1. As long as the wildfires continue burning and upper-atmospheric winds continue to steer the smoke southeastward, we can expect hazy skies across our area.

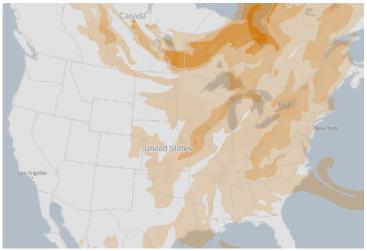


Figure 1. Example of the NOAA experimental forecast product showing smoke intensity for 3 PM EDT on Wednesday, June 4, 2025. Product enhance by the New York Times.

How do hazy skies impact crop production? There are both positive and negative impacts. As mentioned, smoky skies can block incoming solar radiation that is necessary for photosynthetic development. However, the reduced solar radiation can also reduce daytime heating by several degrees causing a reduction in evapotranspiration and other possible drought impacts. Smoke and dust particles – depending upon their concentration – also service as cloud condensation nuclei (i.e., particles that water vapor can condense on to). With the right amount of suspended particles and water vapor in the air, cloud droplet may grow enough to cause precipitation – another important component to crop production. On the other hand, too many suspended particles could simply haze up the sky without encouraging those cloud droplets to grow.

Finally, smoke and dust can create health hazards, particularly for the elderly and those vulnerable to respiratory ailments. Be sure to monitor the Indiana Department of Environmental Management's near real-time air quality maps and data to assess air quality risk levels for your area before spending too much time outdoors. Figure 2 provides an example of one of their maps.

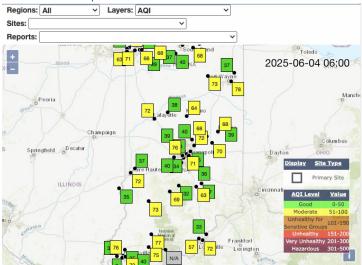


Figure 2. Example output from the Indiana Department of Environmental Management's near real-time air quality map. (
https://www.in.gov/idem/airmonitoring/air-quality-data/).

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