

VEGETABLE CROPS HOTLINE

A newsletter for commercial vegetable growers prepared by the Purdue University Cooperative Extension Service.

In This Issue

- [From The Editor's Desk](#)
- [Coming Cold Snap: When to Plant Watermelons and Considerations Under Suboptimal Temperature Conditions](#)
- [Understanding Nematodes in Soils of Diversified Vegetable Farms in Indiana](#)
- [Root-knot Nematodes and Their Populations Identified in Indiana](#)
- [Mushroom Grower Survey](#)
- [An Impressive Amount of Rain](#)
- [A Tomato Zine for the General Public](#)
- [Two Purdue Field Days This Summer Have Something for Every Fruit and Vegetable Grower](#)
- [Plasticulture Strawberry Update in Southern Indiana](#)

From The Editor's Desk

(Petrus Langenhoven, plangenh@purdue.edu, (765) 496-7955)

Dear Valued Vegetable Crops Hotline Readers,

Welcome to this issue of the 2026 Vegetable Crops Hotline newsletter! Our mission remains steadfast: to deliver crucial updates on pest management, production practices, food safety, and marketing opportunities that directly impact your farming operations.

Growers and Purdue Extension Educators, your input and expertise make this newsletter a truly useful resource. If you have hot topics you'd like us to cover, success stories to share, or questions for our Extension specialists, please email [Petrus langenhoven](mailto:Petrus.langenhoven) or reach out to the [specialist](#) directly. We also welcome high-quality photos of pest issues, unusual symptoms, or innovative production practices you've implemented on your farm.

What's Inside This Issue

This week's *Vegetable Crops Hotline* covers a range of timely topics for fruit and vegetable growers across Indiana. A plasticulture strawberry update from southern Indiana reports an early harvest season with minimal frost damage thanks to row cover use, though thrips have been observed across multiple fields this season. Two articles address soil pest management: one introduces plant-parasitic nematodes (including spiral, lesion,

and root-knot nematodes) and their varying impacts on vegetable crops, while a companion piece focuses specifically on root-knot nematode biology, symptoms, and the populations identified in Indiana. With a cold snap in the forecast, a practical article walks watermelon and cantaloupe growers through planting decisions and protective strategies for suboptimal temperatures, including guidance on reliable weather-forecast sources. A precipitation recap highlights the significant rainfall Indiana received earlier this week, with some south-central counties recording over 5 inches, and includes an introduction to the CoCoRaHS volunteer weather observation network. On the outreach front, readers will find a newly released Tomato Zine from the TOMI project, a mushroom grower survey from NourishCap in partnership with Purdue Extension, and a feature on two upcoming Purdue field days – the Fruit and Vegetable Field Day on July 16 at the Meigs Horticulture Research Farm and the Small Farm Education Field Day on July 23 at the Purdue Student Farm – both running 9 a.m. to 1 p.m. ET with registration open at \$48.

Subscription Information

Hard Copy Subscribers

If you need a hard-copy subscription form and don't have internet access, please contact your nearest [Purdue Extension office](#). Extension Educators, [please download the hard-copy subscription form](#).

Digital Subscribers

If you receive the newsletter via email, you do not need to take any action. You will continue to receive the newsletter on the issue date.

New digital subscribers [can now register their email address](#)

In addition, digital subscribers receive emails with information about articles or announcements that need your immediate attention. These articles will be posted under Hot Topics on the VCH webpage and will be included in the next issue. All previous articles published in the VCH newsletter are available on the [Vegetable Crops Hotline website](#).

Website Links in Newsletter Articles

We frequently include links to websites or online publications. If you can't access these resources, don't hesitate to contact your

local Purdue Extension office or us to request a hard copy of the information.

Midwest Vegetable Production Guide

The [2026 Midwest Vegetable Production guide](#) is now available for growers, or you can [download and print a guide from your computer](#). The guide is also available for \$20 per copy. Contact your Extension Office or [Stephen Meyers](#) directly to buy a copy.

Midwest Vegetable Trial Reports

Are you still considering purchasing vegetable seeds? The [Midwest Vegetable Trial Report](#) features many articles to help you make an informed decision. The resource also hosts production-related research results.

Best regards,

Petrus Langenhoven, Editor
Clinical Assistant Professor and Vegetable Extension Specialist
Department of Horticulture and Landscape Architecture
Purdue University

Coming Cold Snap: When to Plant Watermelons and Considerations Under Suboptimal Temperature Conditions

(Wenjing Guan, guan40@purdue.edu, (812) 886-0198)

A cold snap is forecast for this weekend, although temperature predictions vary slightly across weather sources. At the same time, some early plantings of watermelon and cantaloupe are already in the field in southern Indiana, or seedlings have already arrived and are waiting to be planted. What steps can growers take to protect these young plants and make a decision on whether to plant? And where to find reliable weather forecasts? These are the questions raised by a watermelon grower.

To address the second part of the question, I reached out to Beth Hall at the Indiana State Climate Office. Beth noted that she typically begins with the [National Weather Service](#), which provides the foundational data used by most other forecast providers. Following Beth's recommendation, I reviewed the National Weather Service forecasts and identified the expected minimum temperatures for Friday night. Based on the projections I saw on April 29, we would not anticipate significant issues for cool-season vegetables currently planted across the state. Warm-season crops grown in protected structures should also remain safe, particularly if growers close tunnels early to retain heat and use additional protection such as row covers.

Although the significant risk of frost/freeze across the state was low over the weekend, temperatures raised concerns for watermelon and cantaloupe growers. These crops are particularly sensitive to cold, and the large field scale often makes row covers or other protective strategies impractical. For seedlings that have not yet been planted, delaying transplanting may be the best option. In the meantime, store transplants in a well-ventilated

area and keep them in relatively dry conditions to avoid excess moisture, which can create conditions favorable for disease development.

When to plant watermelons

The follow-up question is: when is the time to plant watermelons? In general, watermelons perform best when soil temperatures are above 70°F. For growers considering early planting, it is important to check both soil temperatures and the weather forecast beforehand. Soil temperatures should be measured in the early morning, when they are at their lowest. If soil temperatures are below 60°F or nighttime air temperatures are forecast to drop below 50°F over the next few days, the risk of poor establishment is relatively high.

Considerations for early planting

When it is not feasible to wait until soil temperatures reach optimal levels, the following practices may help reduce risks:

1. Harden transplants before planting

Hardening is essential for melon crops. This process gradually exposes greenhouse-grown plants to outdoor conditions, helping them accumulate carbohydrates, strengthen cell walls, and promote root development. As a result, plants are better able to tolerate chilling stress. Begin hardening 1-2 weeks before transplanting by moving plants outdoors when temperatures are at least 45-50°F, and gradually increasing their exposure time each day.

2. Use well-rooted transplants

Plant seedlings with a well-developed root ball. Plants of similar above-ground size can differ greatly below ground; those with a firm, fully developed root system are more likely to withstand stress and establish successfully.

3. Consider deeper planting

Burying the hypocotyl while keeping the leaves and growing point above the soil increases the likelihood of survival. Even if leaves are injured by cold, plants can recover as long as the growing point remains intact. In contrast, if the hypocotyl is exposed and damaged by freezing, plant survival is unlikely.

4. Grafted plants with squash rootstocks improve cold tolerance

Grafted watermelons onto squash rootstocks can tolerate low soil temperatures better than non-grafted plants or those grafted onto 'Carolina Strongback' rootstocks. In our experience with cucumbers, squash-rootstock grafted plants can tolerate soil temperatures in the 40s°F, while non-grafted plants often wilt at these temperatures. Additional information about the

performance of the grafted plants under cold stress can be found in the experimental report [Effects of Using Low Tunnel and Grafted Plants for Watermelon Production under Low Temperature Stress in Indiana](#).

What can be expected in fields that are already planted?

A common symptom observed after a cold snap is that seedlings in newly planted fields wilt and may eventually die. Under less severe conditions, older leaves may die while the growing point remains green. These plants can recover when conditions improve. The primary reason for wilting is reduced root function under low soil temperatures. Cold soils limit hydraulic conductivity in the roots, significantly restricting water uptake. As a result, wilting often becomes noticeable in the days following cold nights, especially under sunny, windy conditions, when low humidity increases water loss from leaves. Plants can recover if the cold period is brief and roots regain their ability to take up water. However, it is important to note that soils warm more slowly than the air.

Why do plants wilt in some fields but not others?

Even small differences in temperature can have a significant impact. Field location, topography, soil conditions, etc., influence temperature variation and, consequently, plant response. Another key factor is plant developmental stage. After transplanting, plants prioritize root establishment. Even if plants appear similar above ground, their root systems may differ substantially. Plants established just a few days earlier often have more developed roots and are better able to tolerate chilling stress compared to those more recently transplanted.

What can be done to improve plant survival?

Soils can absorb heat during the day and release it at night, providing a few degrees of protection to plants near the soil surface. To maximize this effect, growers may consider practices that enhance soil heat retention. In general, moist and firm soils absorb and retain more heat than dry, loose soils. Therefore, irrigating fields and avoiding cultivation before a cold event can help improve soil heat storage.

Several commercial products are marketed to help plants tolerate stress through different mechanisms. For example, anti-transpirants such as Vapor Gard® can reduce water loss, and plant growth regulator products such as X-Cyte™ influence plant stress signaling pathways. In addition, a wide range of microbial products and biostimulants are available, claiming to enhance plant resilience. The effectiveness of these products can vary depending on the crop, environment, and type of stress. Each product requires careful evaluation under specific conditions and within watermelon production systems. At this time, we don't

have enough information to support clear recommendations for their use.

This video on [when to plant watermelons](#) provides additional information about this topic.

Understanding Nematodes in Soils of Diversified Vegetable Farms in Indiana

(Wenjing Guan, guan40@purdue.edu, (812) 886-0198), (Lei Zhang, leizhang@purdue.edu) & (Laura Ingwell, lingwell@purdue.edu, (765) 494-6167)

Plant-Parasitic Nematodes

Plant-parasitic nematodes (PPN) are a group of microscopic, worm-like organisms that live in soil or plant tissues and cause damage to crop production. While some species infect aboveground plant parts such as leaves and stems, those of greatest concern across a wide range of vegetables are soil-dwelling species that feed on plant roots. PPNs include multiple genera with different feeding behaviors. Some move freely through the soil and feed externally on roots, such as spiral nematodes. Others enter the roots, either migrating within root tissues (e.g., lesion nematodes) or establishing permanent feeding sites (e.g., root-knot nematodes). The impact of plant-parasitic nematodes varies widely. Some are considered minor pathogens and cause limited damage unless present in high population densities. Others can cause significant crop losses even at relatively low population levels.

Soil Survey on Diversified Vegetable Farms in Indiana

In our recent survey of PPN with soils collected from 18 diversified vegetable farms across 11 Indiana counties, PPN were detected in 23 of the 24 samples (95.8%). Nine PPN genera were found, with spiral nematodes being the most prevalent, followed by lesion and dagger nematodes. Root-knot nematodes were found in 50% of the samples.

Spiral nematodes move freely through the soil and feed externally on plant roots. They are generally considered minor pathogens; however, studies have shown that high populations (>5,000 per 500 cm³ of soil) of spiral nematodes can suppress corn growth. In our survey, high populations of spiral nematodes were detected in three conventionally managed tomato high tunnels. But their potential impacts on tomato growth and yield at these farms are not well understood.

Lesion nematodes were the second most prevalent PPNs in our survey, with densities exceeding 500 nematodes per 500 cm³ of soil in two conventionally and two organically managed tomato high tunnels. The high prevalence of lesion nematodes at diversified vegetable farms is concerning because they provide entry points for pathogenic fungi and bacteria. For example, disease complexes involving lesion nematodes and wilt-inducing fungi such as *Verticillium dahliae* can cause severe decline

syndromes in tomatoes.

The detection of dagger nematodes in our survey is concerning because they are known vectors of tomato ringspot virus (ToRSV). This virus affects a wide range of crops, including fruit trees, common orchard weeds, and ornamentals, and has been documented in the Midwest. Our findings raise concerns about the potential for ToRSV on susceptible crops in Indiana.

Root-knot nematodes are a major parasite that can cause substantial yield losses in vegetable crops. In conventional production systems in southern states, stringent action thresholds are proposed. RKN densities that exceeded the marginal risk threshold - 10 to 99 J2 (second-stage juveniles) per 500 cm³ of soil - were found in 30% of the samples in our survey, the majority of which were collected from high tunnels. Our team is currently conducting research around root-knot nematode management in high tunnels.

Higher PPN densities were observed in high tunnels compared with open-field soils in the survey. This pattern is likely driven by elevated soil temperatures, consistent moisture, and extended cropping periods, which are common in high tunnels. Within high tunnels, we observed a trend toward lower PPN densities in organically managed systems compared with conventional ones. This observation aligns with previous studies suggesting that higher soil organic matter, increased activity of beneficial microorganisms, and differences in crop hosts and management practices may contribute to reduced PPN abundance in organic systems. However, other studies have reported similar or even higher PPN populations under organic management, indicating that these relationships are not universal and are likely influenced by specific management practices and local environmental conditions.

Entomopathogenic Nematodes (EPNs) and Their Presence in the Soil Survey

Not all nematodes are harmful to crops. In fact, many beneficial nematodes inhabit the soil, including entomopathogenic nematodes (EPNs). EPNs form symbiotic associations with bacteria and parasitize soil-dwelling insects, including those that affect vegetable crops, such as fungus gnats, wireworms, crane flies, several species of beetles, and thrips (which pupate in the soil). In our survey, EPNs were detected in 66.7% of the samples, a higher occurrence than reported in many previous surveys of natural and agricultural soils. Despite their widespread presence in diversified vegetable farms, their contribution to insect pest suppression in these systems is not well understood. There are, however, several species of EPN that are commercially available and used in integrated pest management programs. We are conducting ongoing research to evaluate best practices for EPNs in high tunnel production systems.

Additional beneficial nematodes found in soil are free-living and feed on bacteria, fungi, and other nematodes. These beneficial species play an important role in maintaining overall soil health.

Understanding Nematodes in Your Soil

If you are interested in learning more about nematodes in your soil, nematode soil tests can provide a clue. Several labs provide commercial tests for PPNs, such as [Nematode analysis at Michigan State University Plant & Pest Diagnostics, Waters Agricultural Laboratories, North Carolina Department of Agriculture & Consumer Services nematode assay](#). If you are interested in learning about nematodes in general, nematode analysis at Michigan State University provides a comprehensive nematode community analysis that includes beneficials as well. Consult the specific labs for pricing and follow their instructions when collecting samples.

Detailed information about the Soil Survey is published in the journal article [A Survey of Plant-Parasitic and Entomopathogenic Nematodes on Small Vegetable Farms in Indiana](#). This research is supported by USDA National Institute of Food and Agriculture (Organic Transitions Program grant number 2024-51106-43054 and Specialty Crop Research Initiative grant number 2021-51181-35858) and by the North Central Sustainable Agriculture Research and Education (SARE) (project number LNC24-511).

Root-knot Nematodes and Their Populations Identified in Indiana

(Wenjing Guan, guan40@purdue.edu, (812) 886-0198), (Lei Zhang, leizhang@purdue.edu) & (Vijay Singh Kunwar, vkunwar@purdue.edu)

Root-knot nematodes (RKN, *Meloidogyne* spp.) are among the most damaging plant-parasitic nematodes in vegetable production systems. Infective juveniles hatch from eggs in the soil, find and penetrate host plant roots. They migrate to the vascular tissue, where they establish specialized feeding sites, develop into adults, and reproduce by laying eggs on the surface of roots. As feeding sites form, surrounding root cells enlarge and develop into galls, a characteristic symptom of RKN infestation (Figure 1). Root-knot nematodes have a wide host range, and the gall size varies depending on the host crop, nematode species, and severity of infection. For example, tomato plants often develop large, conspicuous galls (Figure 1), whereas pepper plants typically produce smaller, less noticeable galls that can be easily overlooked. Root damage caused by RKN interferes with water and nutrient uptake. Aboveground symptoms commonly include stunted growth, reduced vigor, and nutrient deficiency-like symptoms, ultimately leading to crop yield losses.

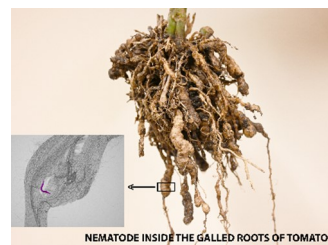


Figure 1. Root-knot nematode damage on tomato roots (Photo by: Lei Zhang).

Over 100 species of RKN have been identified worldwide. Their

distributions vary due to their adaptation to various temperatures, environmental conditions, and host plants. The [Purdue Nematology Lab](#) conducted RKN species identification on 21 root samples collected across Indiana in the past three years. Those samples include watermelons and cantaloupes grown in open-field sandy soils in southern Indiana, as well as tomato and carrot samples from high tunnels statewide. Based on results to date, three RKN species were identified: *M. incognita* (84%), *M. hapla* (14%), and *M. arenaria* (5%). *M. incognita* has been detected in all watermelon and cantaloupe samples from southern Indiana and in several tomato samples across the state. *M. hapla* has been identified in carrot and tomato samples, while *M. arenaria* was detected in a tomato sample.

The *M. incognita* (southern root-knot nematode) and *M. arenaria* (peanut root-knot nematode) are typically found in tropical and subtropical regions, as these species have limited survival at soil temperatures below 50 °F. However, in Indiana, the use of high tunnels, which elevate soil temperatures during winter, and intensive vegetable production in sandy soils, which facilitates nematode movement into deeper, more insulated soil layers, can support the survival and reproduction of these RKN species. In contrast, *M. hapla* (northern root-knot nematode) is adapted to cooler conditions, can survive soil temperatures below 50 °F, and is commonly found in temperate regions.

Why is it important to know RKN species and virulence?

Identification of RKN species is critical when host resistance is used as a management strategy, particularly in tomato production. Most commercial tomato cultivars and rootstocks with RKN resistance rely on a single dominant gene, *Mi-1*, which provides resistance to three species: *M. incognita*, *M. arenaria*, and *M. javanica*. However, this gene does not confer resistance to *M. hapla*. As a result, when *M. hapla* is the predominant species in a field, resistant cultivars or grafted tomatoes with resistant rootstocks are unlikely to provide effective control.

Another important finding from the [Purdue Nematology Lab](#) is the emergence of virulent *M. incognita* populations capable of overcoming *Mi-1*-mediated resistance in tomatoes. Between 2021 and 2025, we observed significant root galling on grafted tomato plants with resistant rootstocks at three independent farms in Indiana. In all cases, the nematode species was identified as *M. incognita*. While resistance breakdown was initially attributed to elevated soil temperatures because *Mi-1* resistance can be compromised at soil temperatures above 82 °F, subsequent testing demonstrated that the nematode populations isolated from these plants were able to reproduce on *Mi-1* resistant tomato cultivars under controlled conditions at 75 °F. This confirmed the presence of virulent *M. incognita* populations. Following this discovery, we evaluated 13 commercial tomato rootstocks under infestation by both avirulent and virulent *M. incognita* populations. All rootstocks effectively suppressed the avirulent populations; however, none provided complete control of the virulent populations.

These findings highlight the importance of identifying RKN species and the virulence within populations. The [Purdue Nematology Lab](#)

can assist with species and virulence identification. Please contact us if you observe root galling on vegetable crops.

This research is supported by USDA National Institute of Food and Agriculture (Specialty Crop Research Initiative grant number 2021-51181-35904 and Organic Transitions Program grant number 2024-51106-43054) and by the North Central Sustainable Agriculture Research and Education (SARE) (project number LNC24-511).

Mushroom Grower Survey

(Scott Monroe, jsmonroe@purdue.edu, (812) 888-7401)

[NourishCap](#) is a digital marketing company that works with mushroom growers. They have partnered with Purdue Extension in an effort to understand and find potential solutions to marketing and shipping barriers faced by mushroom growers.

As part of this process, NourishCap has developed a [grower survey](#). If you are a mushroom grower, please take a few minutes and complete the survey. It will help inform future efforts and activities.

An Impressive Amount of Rain

(Beth Hall, hall556@purdue.edu)

Indiana saw a lot of precipitation in the early part of this past week, with rainfall totals of 0.5" or more in northern and far southwestern counties and more than 5" in south-central Indiana. In fact, an observer just south of Bedford, IN, reported a combined total of 5.80"! Figure 1 shows the 2-day total amounts from volunteer CoCoRaHS observers - illustrating how valuable their contributions are to precipitation monitoring. CoCoRaHS - which stands for Community Collaborative Rain, Hail, and Snow network - is a volunteer citizen science program where anyone with an interest in the weather and in providing data to a larger community can sign up to take daily precipitation observations and report findings online or via a mobile map. Data is then collected nationally and made publicly available for the public to see and use. Programs such as the National Weather Service, state climatologists, emergency managers, and local communities use the data to improve forecast models, assess where flooding risks may be highest, among other things. If you see that there is already an observer near your location, don't let that discourage you from signing up. Precipitation can be highly variable over very short distances, so there are never too many observers! To learn more about this wonderful data science program that you can join, please visit the [CoCoRaHS website](#) and/or email [Beth Hall](#).

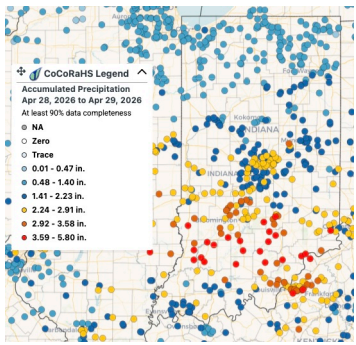


Figure 1. Rainfall totals from the morning of April 27th through the morning of April 29th, 2026.

This rain has helped alleviate most of Indiana’s drought concerns, with streams returning to normal flow levels (some may still be flooding), groundwater levels improving, and vegetation hopefully thriving. Figure 2 shows the latest map from the U.S. Drought Monitor for data through Tuesday morning (i.e., does not include any additional rainfall after 8 AM Eastern Time). Only southwestern counties are considered Abnormally Dry (D0), with a very small area along the Ohio River in Moderate Drought (D1) when both long-term and short-term indicators were considered.

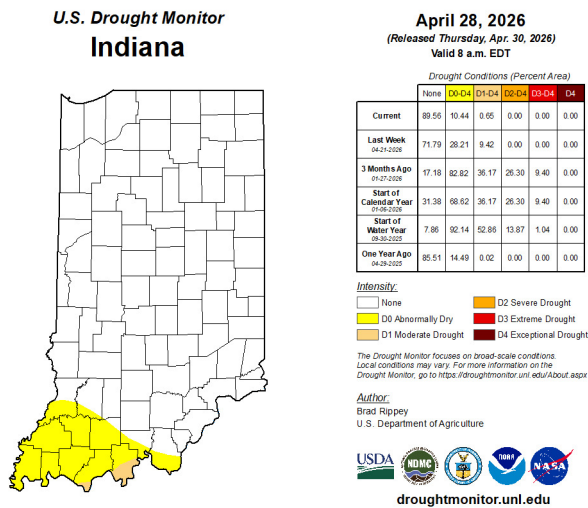


Figure 2. U.S. Drought Monitor categories that considered data through 8 AM EDT Tuesday, April 28th.

While we enter May and look forward to warmer temperatures, there are still risks for frost/freeze events, particularly in low-lying areas and with a northward preference. Current climate outlooks indicate a slight risk of a frost/freeze event next week. Keep an eye on the forecasts in case there is any vulnerable vegetation that may need some extra protection.

A Tomato Zine for the General Public

(Lori Hoagland, lhoaglan@purdue.edu)



The [Tomato Organic Management and Improvement \(TOMI\) project](#), led by Horticulture and Landscape Architecture Prof. Dr. Lori Hoagland, collaborated with the [Culinary Breeding Network](#) to create a Tomato Zine for the general public. The zine highlights the crop’s history, introduces basic botanical traits and culinary attributes, and explains how the TOMI project is working to help tomato growers and consumers continue to enjoy the fruits of this important crop. The broad goal of these zines is to help make science accessible, practical, and enjoyable for everyone. Here is a direct link to the new [Tomato Zine](#).

Two Purdue Field Days This Summer Have Something for Every Fruit and Vegetable Grower

(Petra Langenhoven, plangenh@purdue.edu, (765) 496-7955) & (Lori Jolly-Brown, ljollybr@purdue.edu)

Purdue Extension is hosting two field days this July that together cover a wide range of fruit and vegetable production topics – one tailored to small-scale and urban growers, and one designed for commercial producers looking to engage directly with the latest research from Purdue.

Purdue Fruit and Vegetable Field Day – July 16, 2026



The Purdue Fruit and Vegetable Field Day on July 16 will be held from 9 a.m. to 1 p.m. ET at the Throckmorton Purdue Agricultural Center’s Meigs Horticulture Research Farm, 9101 S. 100 E., Lafayette. Educational sessions will cover high tunnel production systems, pollinator management, soil health strategies, and innovative weed and pest control methods, with opportunities to network with other producers and see current and ongoing Purdue research firsthand. Registration is \$48 and includes a lunch from Great Harvest Bread Co. [Registration is open](#), but the full [agenda](#) will be available soon.

Purdue Small Farm Education Field Day - July 23, 2026



The Purdue Small Farm Education Field Day on July 23 will be held from 9 a.m. to 1 p.m. ET at the Purdue Student Farm, 1491 Cherry Lane, West Lafayette. Co-hosted by the Department of Horticulture and Landscape Architecture and the Purdue Student Farm, this event features hands-on demonstrations and presentations on flower production, low tunnel construction and high tunnel production and management, integrated pest management, and food safety. Registration is \$48; lunch is not included, but a food truck will be on-site. [Registration is open](#), but the full [agenda](#) will be available soon.

Both events run from 9 a.m. to 1 p.m. and welcome sponsors and exhibitors. For questions about either event, contact Lori Jolly-Brown at ljollybr@purdue.edu. If you are in need of accommodations to attend these programs, submit your request for the Fruit and Vegetable Field Day by July 9; requests for the Small Farm Education Field Day by July 16.

Purdue University prohibits discrimination against any member of the University community on the basis of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Vegetable Crops Hotline © Purdue University - vegcropshotline.org

Editor: Petrus Langenhoven | Department of Horticulture and Landscape Architecture, 625 Agriculture Mall Dr., West Lafayette, IN 47907 | (765) 496-7955 | plangenh@purdue.edu

Plasticulture Strawberry Update in Southern Indiana

(Wenjing Guan, guan40@purdue.edu, (812) 886-0198)

Strawberry harvest has begun in southern Indiana, with growers reporting that the season started at least a week earlier than usual. We experienced a frost event in mid-March, along with a few light, scattered frosts afterward. Fortunately, with the use of row covers, crop damage has been minimal across the region.

Overall, the spring was relatively dry until the heavy rain on April 27. Disease pressure has been low, likely due to the dry conditions during the bloom period. However, these same conditions can favor certain insect pests. Thrips, for example, have been observed in multiple strawberry fields this season. More information about thrips and their management can be found in this [article](#).

In addition to thrips, we have also observed damage from tarnished plant bugs. These insects feed on strawberry flowers and developing fruit, leading to aborted blooms or misshapen berries. More details on tarnished plant bugs are available in this [article](#). Tarnished plant bugs are attracted by fast-growing weeds and certain cover crops. The grower from the farm where we saw tarnished plant bug damage reported that the insects were highly attracted to the crimson clover used as a cover crop.