

# VEGETABLE CROPS HOTLINE

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

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## From The Editor's Desk

(Petrus Langenhoven, [plangenh@purdue.edu](mailto: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* issue covers four topics for Indiana vegetable producers. With watermelon and cantaloupe transplanting wrapping up and above-normal rainfall creating favorable conditions for disease, growers are reminded to initiate fungicide applications preventively and to record their first spray date when using the MELCAST system to track Environmental Favorability Index values. Resources are available through [Extension bulletin BP-67-W](#) and the [MELCAST website](#). The Purdue cut flower team shares mid-season observations from demonstration sites in Vincennes, Indianapolis, and West

Lafayette on cool-season species including snapdragon, stock, and ornamental cabbage, with the southern Indiana site currently ahead of the others in bloom development. Registration is now open for both the Purdue Fruit and Vegetable Field Day (July 16, Meigs Horticulture Research Farm, Lafayette, \$48) and the Purdue Small Farm Education Field Day (July 23, Purdue Student Farm, West Lafayette, \$48), each running 9 a.m. to 1 p.m. and featuring demonstrations on topics ranging from high tunnel pest management and Scotch bonnet pepper variety trials to cut flower production, low tunnel construction, and postharvest sanitation. On the weather front, statewide temperatures averaged about 2°F below normal over the past 30 days, with Modified Growing Degree Day totals since April 1 ranging from roughly 150 units in northern Indiana to nearly 980 in the south. Finally, mark your calendars for the 2027 Indiana Horticulture and Small Farm Conference, scheduled for January 26–28 in Danville, Indiana.

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### 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

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## Mark Your Calendar: Two Purdue Field Days This Summer for Fruit and Vegetable Growers

(Petrus Langenhoven, [plangenh@purdue.edu](mailto:plangenh@purdue.edu), (765) 496-7955)

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. This year's agenda features demonstrations on pollination and pest management in high tunnel tomatoes using companion cut flower plantings, dogwood borer identification and management in apple orchards, an introduction to the long-term Resilient Agriculture Research Trial comparing reduced-input and conventional specialty crop production, Scotch bonnet pepper variety performance and mechanical harvest potential, automated smart trap technology for cucumber beetle monitoring in cucurbits, and cut flower production for Midwest markets.

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 cut flower production from seed to sale, microbial approaches to managing root-knot nematodes in high tunnel tomatoes, log-based mushroom production, low tunnel construction and season extension management, insect scouting tools and IPM technologies for high tunnel systems, silage tarp use for weed management in potatoes, and postharvest produce sanitation and rinse conveyor systems. After-lunch on-demand demonstrations will cover black soldier fly rearing for fertilizer and feed production, a hands-on fresh flower arranging session, and sweet pepper varieties for high tunnel production. 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](mailto: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.

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## Optimizing Spray Applications Using MELCAST

(Cesar Escalante, [escalac@purdue.edu](mailto:escalac@purdue.edu))

*Author's note: This article is adapted from a previous article published in Vegetable Crops Hotline, Issue 598, by Dr. Dan Egel*

Many growers have already finished transplanting watermelons and cantaloupes, while others completed planting a few weeks ago and may be preparing to begin fungicide applications. In many areas of Indiana, rainfall has been relatively high, which can create favorable conditions for disease development. When possible, fungicide applications should be initiated preventively. If you plan to use the Melcast system to schedule applications, be sure to record your first spray date so that EFI (Environmental Favorability Index) values can be used effectively. Instructions for using and recording EFI values can be found in [Extension bulletin](#)

BP-67-W, which is available on the [MELCAST website](#). You may also contact me if you would like a copy or need assistance.

A common question among growers is when and how fungicides should be applied. Applying fungicides according to a weather-based system is straightforward for cantaloupe and watermelon growers. MELCAST was developed at Purdue University by Dr. Rick Latin to help growers apply foliar fungicides to control *Alternaria* leaf blight, anthracnose, and gummy stem blight. When MELCAST is followed, fungicides are applied when needed most, based on leaf moisture and temperature. The system was managed by Dr. Dan Egel for several decades, and I am now pleased to continue managing it. Stay alert for the weekly updates sent by the Southwest Purdue Agricultural Program. If you would like to be added to the MELCAST email list, please contact me or Barbara Joyner at [joynerb@purdue.edu](mailto:joynerb@purdue.edu).

The MELCAST program uses weather information from one of 15 sites located across Indiana. It also serves growers in Georgia, Michigan, and Ohio. Cantaloupe and watermelon growers should farm within approximately 50 miles of a MELCAST site. If rain events, dew formation, and temperatures at one of the MELCAST sites are similar to those at your farm, MELCAST should be effective for you. Growers using MELCAST typically apply foliar fungicides every 14 days unless weather thresholds described below indicate that an application should be made sooner. A step-by-step guide to using MELCAST is provided below:

1. Start fungicide application at or before vines touch within a row. Applications can begin earlier if disease pressure is high.
2. Check the EFI value for the day of fungicide application.
3. Calculate the threshold for the next application by adding 20 (cantaloupe) or 35 (watermelon) to the EFI value in step 2. It is important for cantaloupe and watermelon growers to use the EFI values designed for their crop. To get a MELCAST calendar to keep track of EFI values, call Cesar Escalante or download the spreadsheet from the MELCAST website.
4. Apply the next fungicide application 14 days after the first, or sooner if the EFI threshold has been reached.
5. Check the EFI values on the day you make your next fungicide application and recalculate the threshold for the next application.

It is best to apply fungicides before the threshold is reached rather than after. For example, if you are a watermelon grower and the EFI threshold has reached 33 with rain expected soon, consider applying a fungicide ahead of time. Use the thresholds of 20 and 35 EFI units as general guidelines, and consider using a lower threshold if disease pressure is high. Finally, note that fungicide applications for downy mildew and powdery mildew cannot be scheduled using MELCAST. Likewise, applications for bacterial diseases cannot be scheduled based on MELCAST.

## Indiana Horticulture and Small Farms Conference: Save the Date

(Petrus Langenhoven, [plangenh@purdue.edu](mailto:plangenh@purdue.edu), (765) 496-7955)

**2027**

**INDIANA HORTICULTURE AND SMALL FARM CONFERENCE**

**PLANT IDEAS.  
BUILD CONNECTIONS.  
GROW YOUR OPERATION.**

**January 26-28**  
**Hendricks County Fairgrounds - Danville, Indiana**

Purdue University is an Equal Opportunity/Equal Access University

Registration opens in July 2026. For up-to-date information, visit the [Indiana Horticulture and Small Farms Conference website](#).

## Spring Planted Cool-Season Cut Flower Update – Snapdragon, Stock, Ornamental Cabbage

(Wenjing Guan, [guan40@purdue.edu](mailto:guan40@purdue.edu), (812) 886-0198), (Jayde Grisham, [jmgrish@purdue.edu](mailto:jmgrish@purdue.edu)) & (Laura Ingwell, [lingwell@purdue.edu](mailto:lingwell@purdue.edu), (765) 494-6167)

The Purdue cut flower team is currently conducting cut flower demonstrations at three locations in Indiana. In this article, we provide updates and observations on cool-season flowers from the three sites, including open-field and high-tunnel plantings in Vincennes, an open-field site in Indianapolis, and an open-field site in West Lafayette, representing southern, central, and northern Indiana. The cool-season cut flowers evaluated in the project were started from seed in February and transplanted in March.

At the Vincennes and West Lafayette locations, plants were grown on raised beds covered with plastic mulch, while at the Indianapolis location they were grown on flat beds covered with a fabric weed barrier. Multiple flower species have bloomed at the southern Indiana location, but not in central and northern Indiana locations yet. This article primarily discusses observations on snapdragon, stock and ornamental cabbage.

### Snapdragon

Snapdragon cultivars are divided into Groups 1-4. Groups 1 and 2 generally prefer cool temperatures, short days, and low light, and

Groups 3 and 4 are adaptive to warm temperatures and long days. In this evaluation, we selected cultivars representing different groups, including 'Antibes Apricot' (Group 1), 'Maryland Lavender' (Group 2), 'Chantilly™ Purple' (Group 1-2), 'Potomax Ivory' (Groups 3-4) and 'Orleans Red' (Group 3-4).

At the southern Indiana location, all snapdragon cultivars were transplanted into the open field on March 19. 'Antibes Apricot' and 'Potomax Ivory' were also transplanted in a high tunnel on March 27. Plants were not pinched. The Group 1 cultivar 'Antibes Apricot' flowered the earliest, with first blooms observed approximately 4-5 weeks after transplanting. Harvest began around mid-May, 6 weeks after transplanting in the high tunnel and 7 weeks after transplanting in the open field. Flowers harvested from the high tunnel had acceptable stem length (>12 inches), whereas stems from open-field plants were generally too short to be marketable by florists. The other Group 1-2 cultivars, 'Maryland Lavender' and 'Chantilly™ Purple', flowered about one week later than 'Antibes Apricot'. All Group 1-2 cultivars grown in the open field had unmarketable stem lengths (Figure 1).

The Group 3-4 cultivar 'Orleans Red' began flowering as this article was being prepared, approximately 9 weeks after transplanting in the open field, earlier than 'Potomax Ivory'. 'Potomax Ivory' grown in the high tunnel also started flowering this week and produced noticeably longer stems compared to 'Antibes Apricot' (Figure 2). We will continue to monitor the performance of the Group 3-4 cultivars and provide updates in the next article.



Figure 1. Snapdragon cultivars Group 1-2 grown in open field at the southern Indiana location. The flowers were harvested on May 25, 2026 (Photo by Wenjing Guan).



Figure 2. Snapdragon cultivar 'Potomax Ivory' in front of the row and 'Antibes Apricot' in the back of the row. The plants were grown in a high tunnel at Southwest Purdue Agricultural Center (Photo taken on May 25, 2026, by Wenjing Guan).

## Stock

We included cultivars 'Katz Lavender Blue', 'Iron Marine', and 'StoX® Antique Rose' to represent Katz, Iron, and StoX series of stock in the evaluation. The three cultivars were planted in both high tunnels and open field on March 19 at the Southern Indiana location. Among the three cultivars, 'Katz Lavender Blue' bloomed the earliest, and some plants produced more than one stems with longer stem length. Plants grown in the high tunnels were harvested 8-9 weeks after transplanting, and in open field about 9-10 weeks after transplanting. Blooms in the high tunnel reached stem lengths at 12 inches, whereas stem length and flower quality were generally unmarketable for those grown in open field.



Figure 3. Some 'Katz Lavender Blue' developed more than one stem per plant in a high tunnel at the southern Indiana location (Photo was taken on May 11, 2026, by Wenjing Guan).



Figure 4. Stocks grown in open field had short stems and unmarketable flower quality (Photo taken on May 25, 2026, by Wenjing Guan).

## Ornamental Cabbage

Unlike many cut flowers, the value of ornamental cabbage comes from its colorful foliage rather than its flowers. We observed interesting differences in the performance of ornamental cabbage

'Crane White' across the three locations. Plants grown at the central Indiana location developed the best white coloration compared to those at the other sites, even though many other cut flowers at the location experienced stress from excessive moisture (Figure 5). At the southern Indiana location, 'Crane White' grown in the high tunnel did not develop the characteristic white coloration. In contrast, plants grown in the open field at the same location developed white coloration earlier, but the color gradually faded as temperatures increased (Figure 6).



Figure 5. Ornamental cabbage 'Crane White' grown at three locations. Left: 'Crane White' grown at the central Indiana location (photo taken on May 21). Middle: 'Crane White' grown at the northern Indiana location (photo taken on May 12). Right: 'Crane White' grown in high tunnel at the southern Indiana location (photo taken on May 19) (Photos by Jayde Marie Grisham, Laura Ingwell and Wenjing Guan).



Figure 6. Ornamental cabbage 'Crane White' grown at the southern Indiana location in open field; note the color faded (Photo taken on May 19, 2026, (left) and May 25, 2026, (Right) by Wenjing Guan).

## Dryness Returns to Northern Indiana as Southern Conditions Improve

(Austin Pearson, [pearsona@purdue.edu](mailto:pearsona@purdue.edu), (765) 675-1177)

Temperatures across Indiana averaged 2°F below normal during the past 30 days (April 28–May 27) (Figure 1). Warmer-than-normal conditions earlier in April accelerated the start of the growing season, though cooler weather lately slowed Modified Growing Degree Day (MGDD) accumulation. Since April 1, MGDD totals have ranged from about 150 units in northern Indiana to nearly 980 units in southern Indiana (Figure 2). North of Indianapolis, accumulations have generally been near to slightly below normal, while southern Indiana remains 60 to 180 units above average through May 27. Recent warmer temperatures have also promoted rapid crop growth statewide.

Estimated Between Two Dates Data (Temperature & Precipitation, April 28, 2026 to May 27, 2026)

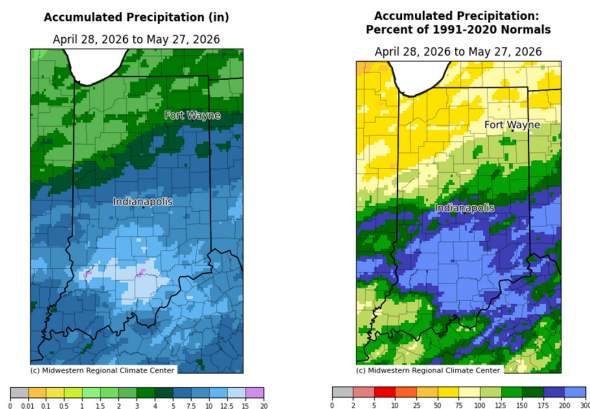
Climate Division	Temperature (F)	Average (F)	Deviation (F)	Precipitation (in)	Average (in)	Deviation (in)	% of Average
IND1	57.4	58.5	-1.8	2.75	4.15	-1.40	66
IND2	57.4	58.3	-1.9	3.63	4.12	-0.49	88
IND3	57.2	59.2	-2.0	4.99	4.22	0.77	97
IND4	59.2	61.6	-2.4	6.81	4.51	2.30	151
IND5	59.0	61.2	-2.2	7.91	4.82	3.09	171
IND6	58.0	60.5	-2.5	7.98	4.45	3.53	199
IND7	60.8	64.1	-3.6	9.72	5.91	3.81	164
IND8	61.2	64.1	-3.9	11.06	5.22	5.84	209
IND9	60.6	62.9	-2.3	16.67	5.14	11.53	224
IN	59.3	61.3	-2.0	7.02	4.66	2.36	151



Figure 1. Temperature and precipitation summaries for April 28-May 27, 2026, by Indiana climate division. Values shown include average temperature, 1991-2020 average temperature, temperature departure from normal, total precipitation, 1991-2020 average precipitation, precipitation departure from average, and percent of average precipitation.

Figure 2: Left - Accumulated Modified Growing Degree Days (MGDD) from April 1 through May 27, 2026. Right - MGDD departures from the 1991-2020 normal for the same period.

Precipitation over the past 30 days has been a tale of two regions across Indiana. Central and southern Indiana have generally received above-normal rainfall, while northern Indiana has remained drier than normal (Figure 3). The driest conditions have been focused across northwest Indiana, where Climate Division 1 averaged just 2.75 inches of precipitation from April 28 through May 27 (Figure 1). That was 1.40 inches below normal, or 66 percent of average. These deficits have allowed soils to dry and contributed to the redevelopment of abnormally dry (D0) conditions.

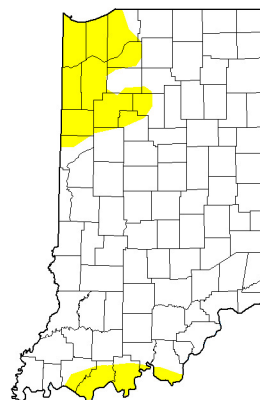


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Figure 3. Left - Accumulated precipitation from April 28 through May 27, 2026. Right - Percent of 1991-2020 normal precipitation for the same period.

The latest U.S. Drought Monitor, released May 28, expanded D0 conditions across much of northwestern Indiana following persistent dryness (Figure 4). Meanwhile, southern Indiana improved after several rounds of heavy rainfall. Areas along the Ohio River that were in moderate drought (D1) last week improved to D0 in the latest update.

U.S. Drought Monitor  
Indiana



May 26, 2026  
(Released Thursday, May 28, 2026)  
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D2	D2-D3	D3-D4	D4
Current	85.79	14.21	0.02	0.00	0.00	0.00
Last Week 05-19-2026	90.32	9.68	2.52	0.00	0.00	0.00
3 Months Ago 02-24-2026	19.57	80.43	43.74	26.85	9.45	0.00
Start of Calendar Year 01-01-2026	31.38	68.62	36.17	26.30	9.40	0.00
Start of Water Year 09-01-2025	7.86	92.14	92.86	13.87	1.04	0.00
One Year Ago 05-27-2025	87.84	32.06	20.59	0.00	0.00	0.00

Intensity:  
None D2 Severe Drought  
D0 Abnormally Dry D3 Extreme Drought  
D1 Moderate Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:  
Adam Algood  
NOAA/NWS/NCEP/CPCC



droughtmonitor.unl.edu

Figure 4. May 26, 2026, US Drought Monitor Map, released on May 28, 2026.

Looking ahead, Indiana is expected to enter a dry stretch of weather, which should support increased field activity in wetter areas of the state. Forecasts indicate little to no precipitation across most of Indiana between May 28 and June 4, with only isolated totals up to one-tenth of an inch possible in far southwestern Indiana. This pattern will likely allow soils to dry further, especially across northern Indiana where deficits have already developed. Beyond early June, Climate Prediction Center outlooks favor a transition toward near- to above-normal precipitation by mid-month.

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