FANCY FRUIT

A Newsletter for Commercial and Advanced Amateur fruit growers.

In This Issue

Issue: 25-01 April 3, 2025

- From the Editor
- Crop Conditions
- Tracking tornadoes over time

PURDUE UNIVERSITY

- Scientists Seek Perennial Fruit Grower Input on Novel Technologies
- Stakeholder Toolkit
- Plasticulture Strawberry Update from Southern Indiana
- What's in a (Herbicide) Name?
- Join us to Learn about the Spotted Lanternfly & Its Effects on Indiana Vineyards
- Tree Fruit Success for Home & Small Farm | Elkhart County
- Horticulture Research Manager
- All Upcoming Events

From the Editor

(Miranda Purcell, mrpurcel@purdue.edu)

Welcome to the first issue of the 2025 Facts for Fancy Fruit newsletter!

I am excited to help carry on the tradition of providing timely, research-based information to fruit growers across the state.

With all the crazy weather across the state this week, I know we are all dreaming of the day we can pick the first sun-ripened strawberry or plump grape off the vine this summer. Folks are anxious to get pruning done, and we cross our fingers as nightly temperatures in some parts of the state dip below freezing. Check out Crop Conditions in each issue to see the current phenology stage for strawberry, blackberry, apple, pear, grape, peach, plum, pawpaw and black currant in Lafayette, IN. Also, I encourage you to refer to the frost/freeze probability maps if you plan to plant any new crops this spring.

FACTS FOR

If there is a topic you would like to see covered, please feel free to reach out to me at mrpurcel@purdue.edu.

Please be on the lookout for a survey we will be conducting at the end of the season to figure out how we can better serve our subscribers.

Wishing you all a productive season ahead!

Miranda Purcell Viticulture Extension Specialist Purdue University

Crop Conditions

(Wil Brown-Grimm, wbrowngr@purdue.edu)

Welcome to Spring! Things have begun to green up here at Meigs as we've had some warmer weather and plenty of rain. Consequently, this week has been a push to make our first-ofseason herbicide and fungicide applications in the orchard. Though we breached 80F a couple times already, our fruit trees and brambles do not seem to be developing as early as last year. The progress they have made seemed to happen overnight! There are a couple open blooms in the plums, but everything seems on track to be fruitful this year weather permitting. We put in a lot of time pruning in the orchard and brambles this Winter and are looking forward to its reward later this Summer/Fall.



Strawberries: Vegetative growth



Pear: Bud burst



Black Currant: Bud development



Apple (Pixie Crunch): Half-inch green



Plum: White bud



Peach: Swollen bud



Apple (Rosalee): Half-inch green



Grapes: Dormant



Pawpaw: Swollen bud



Blackberry: Bud development

Tracking tornadoes over time

(Beth Hall, bhall@purdue.edu)

Indiana has already experienced several tornadoes this year with more certainly to come. Of course, this is not unusual since Indiana is often considered on the far northeastern edge of "Tornado Alley". Tornadoes get their energy from the battle between the cooler, drier Canadian air moving southeastward and the warmer, more humid air coming north from the Gulf region. The greater the contrast in both temperature and humidity, the more likely winds and energy will be generated to develop those nasty weather events. This is why tornadoes are most common in our spring and in recent years autumn tornadoes have occurred with greater frequency.

The Midwestern Regional Climate Center (MRCC) provides a Tornado Tracks Tool (https://mrcc.purdue.edu/gismaps/cntytorn) where users can view the estimated tracks of tornadoes from 1950 through 2023 (Figure 1). Official tornado data from the federal Storm Prediction Center (SPC) is released annually, and 2024 data should be released soon. The tool allows filtering by tornado magnitude, year range, months, and whether there were any documented injuries and/or fatalities. Clicking on a tornado provides further information. Do you remember a tornado from your past that you still

The National Weather Service provide a nice tool for looking at the climatology of a broader range of events (e.g., tornadoes, hail, wind) (https://experience.arcgis.com/experience/17054 1dee33b48b7b88514b8f65e601f). Similar to the MRCC tool, this tool only has data through 2023. For more recent storm reports, the Southern

tell stories about? Use that tool to explore what

official records have to say about it!

Regional Climate Center (SRCC) provides an interactive tool similar to the MRCC Tornado Tracks tool but includes recent storm report data from the SPC (Figure 2). This tool includes a much broader range of storm types such as drought, flood, fire, hail, hurricanes, thunderstorms, and tornadoes. Users can select a period, zoom into their area of interest, and select which types of storm events to view. A table below the map provides additional information about each event.

Extreme weather events are nothing to take lightly, and safety should always be the priority during the event. However, once the event has passed and it can be shared as an memory or anecdote, using these tools can be a fun way to see how your event stacks up to other events nearby.



Figure 1. Snapshot of the MRCC's Tornado Tracks tool depicting tornadoes greater than or equal to an EF3 on the enhanced Fujita scale from 1950 through 2023.



Figure 2. Snapshot of the SRCC storm reports tool showing hail (red), tornado (blue), and strong wind (green) reports from March 28 through April 1, 2025.

3

Scientists Seek Perennial Fruit Grower Input on Novel Technologies

(Stephen Meyers, slmeyers@purdue.edu)



Figure 1. An autonomous airblast sprayer is demonstrated at a robotics field day in Woodland, California 2024.

A group of horticulture crop weed scientists across the country is seeking your help to determine the needs and barriers to adopting novel weed control technologies. Our focus is on perennial crops!

This survey is confidential- your identity will not be linked to your responses. All questions are optional. It takes about 10 minutes to complete it. We appreciate your time and support in our research effort.

Thank you for participating in our USDA SCRI Planning Team's Novel Weed Management in Perennial Crops Survey.

Please scan the QR code or click this link: https://iastate.qualtrics.com/jfe/form/SV_eqzMrFK tlcDjjgO



Stakeholder Toolkit

(Peter M Hirst, hirst@purdue.edu, (765) 494-1323)

Agricultural Producers Have Until April 15 to Enroll in USDA's Key Commodity Safety Net Programs for the 2025 Crop Year

In an effort to remind agricultural producers about USDA Farm Service Agency's Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) enrollment deadline for the 2025 crop year. I am sharing a toolkit that includes talking points, a newsletter article, suggested social media posts and corresponding graphic images. Meeting the deadline is critical. If producers fail to complete enrollment by the April 15 deadline, they will be ineligible to receive payment for the 2025 crop year should a covered commodity payment trigger for ARC and/or PLC.

We need your help to spread the word to eligible producers. This toolkit includes:

- Talking Points
- Newsletter Article
- Social Media Suggestions
- Graphics (attached)

If you have any questions, please contact Angie Stuehrenberg at angie.stuehrenberg@usda.gov.

Talking Points

- FSA announced the 2025 enrollment periods for key safety-net programs Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) beginning on January 21 to April 15.
- Our safety-net programs provide critical financial protections against commodity market volatilities for many American farmers, so don't delay enrollment.
- If you're getting coverage through the Agriculture Risk Coverage or Price Loss Coverage programs, avoid the rush and contact your local FSA office for an appointment. Even if you are not changing your program election for 2025, you still need to sign a contract to enroll.
- ARC and PLC provide financial protections to farmers from substantial drops in crop prices or revenues and are vital economic safety nets for most American farms.
- The American Relief Act, 2025 extended many Farm Bill-authorized programs for another year, including ARC and PLC.
- Producers can elect coverage and enroll in ARC-County (ARC-CO) or PLC, which provide crop-by-crop protection, or ARC-Individual (ARC-IC), which protects the entire farm.
- Although election changes for 2025 are optional, producers must enroll through a signed contract each year.
- Also, if a producer has a multi-year contract on the farm it will continue for 2025 unless an election change is made.
- If producers do not submit their election revision by the April 15 deadline, their election remains the same as their 2024 election for commodities on the farm. Farm owners cannot enroll in either program unless they have a share interest in the

cropland.

- Covered commodities include barley, canola, large and small chickpeas, corn, crambe, flaxseed, grain sorghum, lentils, mustard seed, oats, peanuts, dry peas, rapeseed, long grain rice, medium grain rice, safflower seed, seed cotton, sesame, soybeans, sunflower seed and wheat.
- USDA also reminds producers that ARC and PLC elections and enrollments can impact eligibility for some crop insurance products including Supplemental Coverage Option, Enhanced Coverage Option and, for cotton producers, the Stacked Income Protection Plan (commonly referred to as STAX).
- For more information on ARC and PLC, producers can visit the ARC and PLC webpage or contact their local USDA Service Center.

Newsletter Article

Title: USDA Reminds Agricultural Producers to Enroll in Key Safety Net Programs by April 15

Body Text: Agricultural producers who have not yet enrolled in the Agriculture Risk Coverage (ARC) or Price Loss Coverage (PLC) programs for the 2025 crop year have until April 15, 2025, to revise elections and sign contracts. Both safety net programs, delivered by USDA's Farm Service Agency (FSA), provide vital income support to eligible farmers who experience substantial declines in crop prices or revenues for the 2025 crop year.

Agriculture Risk Coverage or Price Loss Coverage programs provide excellent risk protection, for market declines, at no cost to the producer. If you haven't made your program election or signed a contract, please contact your local FSA county office as soon as possible to set an appointment so you don't miss the April 15 deadline. Producers can elect coverage and enroll in ARC-County or PLC, which provide crop-by-crop protection, or ARC-Individual, which protects the entire farm. Although election changes for 2025 are optional, producers must enroll, with a signed contract, each year. If a producer has a multiyear contract on the farm, the contract will continue for 2025 unless an election change is made.

If producers do not submit their election revision by the April 15, 2025, deadline, the election remains the same as their 2024 election for eligible commodities on the farm. Also, producers who do not complete enrollment and sign their contract by the deadline will not be enrolled in ARC or PLC for the 2025 year and will not receive a payment if one is triggered. Farm owners can only enroll in these programs if they have a share interest in the commodity.

Producers are eligible to enroll farms with base acres for the following commodities: barley, canola, large and small chickpeas, corn, crambe, flaxseed, grain sorghum, lentils, mustard seed, oats, peanuts, dry peas, rapeseed, long grain rice, medium and short grain rice, safflower seed, seed cotton, sesame, soybeans, sunflower seed and wheat.

Web-Based Decision Tools

Many universities offer web-based decision tools to help producers make informed, educated decisions using crop data specific to their respective farming operations. Producers are encouraged to use the tool of their choice to support their ARC and PLC elections.

Crop Insurance Considerations

Producers are reminded that enrolling in ARC or PLC programs can impact eligibility for some crop insurance products offered by USDA's Risk Management Agency (RMA). Producers who elect and enroll in PLC also have the option of purchasing Supplemental Coverage Option (SCO) through their Approved Insurance Provider, but producers of covered commodities who elect ARC are ineligible for SCO on their planted acres.

Unlike SCO, RMA's Enhanced Coverage Option (ECO) is unaffected by participating in ARC for the same crop, on the same acres. Producers may elect ECO regardless of their farm program election.

Upland cotton farmers who enroll seed cotton base acres in ARC or PLC are ineligible for the stacked income protection plan, or STAX, on their planted cotton acres.

Optimizing FSA Office Visits

Agricultural producers visiting FSA to complete ARC/PLC elections and enrollment are encouraged to also conduct other FSA program business during their scheduled appointment including completing farm loan applications and applying for the recently announced Emergency Commodity Assistance Program (ECAP).

Sign up for ECAP began on March 19, 2025. ECAP, authorized by the American Relief Act, 2025, provides up to \$10 billion to agricultural producers for the 2024 crop year. Administered by FSA, ECAP will help agricultural producers mitigate the impacts of increased input costs and falling commodity prices. Congress gave USDA 90 days to implement the program, and that deadline was met. Producers of eligible commodities must submit ECAP applications to their local FSA county office by Aug. 15, 2025. Only one application is required for all ECAP eligible commodities nationwide. ECAP applications can be submitted to FSA in-person, electronically using Box and One-Span, by fax or by applying online at fsa.usda.gov/ecap utilizing a secure login.gov account. For more information, please visit the ECAP website or review the ECAP Fact Sheet.

For more information, visit fsa.usda.gov.



Don't delay! You have until April 15 to revise elections and enroll in the ARC and PLC programs for the 2025 crop year, and @usdaFSA is here to assist.

Plasticulture Strawberry Update from Southern Indiana

(Wenjing Guan, guan40@purdue.edu)

Crop Status

Plug plants set on black plastic mulch in late summer and early fall are approaching full bloom. Some early blooms may have been damaged by recent low temperatures. Moving forward, growers should remain vigilant in protecting these crops from potential frost injury (Figure 1). Bare-root plants that were planted on white plastic during the summer and covered with straw are growing new leaves. Flower buds have not yet been observed on the main-season cultivars (Figure 2).



Figure 1. These plants are approaching bloom in southern Indiana.



Figure 2. These plants were covered with straw in the winter. Straw was removed around March 10. The plants are growing new leaves.

About Neopestalotiopsis

Plug plants infested with Neopestalotiopsis were found in Indiana. The infected plants exhibited stunted growth last fall, and some of the smaller plants did not survive the winter (Figure 3).



Figure 3. Neopestalotiopsis was confirmed in the field last fall, and some plants did not survive the winter.

The current questions are: for the surviving plants—especially those that appear healthy—are they worth saving? And what fungicide program can be used to protect adjacent, unaffected plants?

Over the winter, I've been consulting with plant pathologists to learn more. The pathogen appears to spread, and can persist in the field for extended periods. Fungicides including Switch, Thiram, and products in FRAC Group 3 have shown effectiveness. More information on managing Neopestalotiopsis, please check the following resources:

Natalia Peres, University of Florida, Strawberry disease season roundup: Neopestalotiopis, of course, but that is not all!

Nicole Gauthier, University of Kentucky, Neopestalotiopsis disease in Kentucky strawberry

A bit of good news: several cultivars with improved tolerance to *Neopestalotiopsis* will become available in the coming season. They are from Florida and California breeding programs. But I don't yet have information on how they would perform under conditions in our region.

What's in a (Herbicide) Name?

(Stephen Meyers, slmeyers@purdue.edu)

A colleague recently emailed me a label for a new herbicide, *Chateau Complete* (Figure 1). I first applied Chateau 18 years ago, and the label that landed in my inbox looked very familiar. It took me a minute to figure out how this was different from previous formulations (Figure 2). "Chateau Complete" is actually a premix of two active ingredients: flumioxazin (Chateau) and rimsulfuron (Matrix). While *Chateau SW* (dry formulation) and *Chateau EZ* (liquid formulation) are labeled in some two dozen crops, the use of Chateau Complete is far more restrictive and limited to blueberries, citrus, grape, pome fruit, stone fruit, and tree nuts.



Figure 1. Chateau® Complete herbicide containing two active ingredients, flumioxazin and rimsulfuron.



Figure 2. Chateau® SW herbicide containing only flumioxazin.

If you are already confused by three formulations of Chateau®, you are in good company. As herbicide formulations evolve and become more complex, it can be a lot to keep straight- even for a weed scientist or agrochemical salesperson. Here are a couple tips to help you avoid a costly misapplication:

Tip 1: Double check the active ingredients and the registered crop uses on the label.

This is the quickest and easiest way to know "what's in the jug?" and which crops it can be applied to.

Tip 2: Confirm the concentration and use rate.

One trend in herbicides and other everyday products is increasing concentration- squeezing more active ingredient in the same size jug. Just look at the latest formulation of Roundup®, PowerMax 3. It contains 5.88 pounds of glyphosate per gallon. Older formulations (PowerMax® or PowerMax® II) contain 5.5 pounds of glyphosate per gallon. That is a pretty subtle difference compared to the two formulations of Stinger® herbicide available today. The older formulation labeled for fruit crops with numerous 24C Special Local Needs labels, contains 3 pounds of clopyralid per gallon. The new Stinger® HL formulation contains 5 pounds of clopyralid per gallon. In other words, the amount of herbicide you spray across an acre will vary based on the product's formulation.

Tip 3: Be aware that some formulation names are more for marketing and less for function.

When I was first learning about herbicide formulations, the letters that accompanied the product name were very practical. "L" meant "liquid". "EC" meant "emulsifiable concentrate". "WP" meant "wettable powder". These letters told the applicator important information about the formulated product and had implications for things such as mixing order when applying a tank-mix.

In recent years, these letters have become harder and harder to follow. Chateau® EZ was named "EZ" because the product was formulated to make the transition from dry Chateau SW to liquid EZ simple (or "easy"). If you used to apply 2 *dry* ounces of Chateau SW, you could simply apply 2 *liquid* ounces of Chateau EZ instead. The "HL" in "Stinger® HL" stands for "high load", indicating its more highly concentrated formulation compared to "Stinger®". The "XL" in Goal® 2XL is a nod to its "extra-long" control of weeds.

In construction, the adage is to "measure twice and cut once". When it comes to the everchanging world of agrochemicals, we would be wise to give the label an extra look before we spray.

Join us to Learn about the Spotted Lanternfly & Its Effects on Indiana Vineyards

(Miranda Purcell, mrpurcel@purdue.edu)

Spotted Lanternfly Identification, Control, and Management Plus Spotted Lanternfly Effects on Indiana Vineyards

Join Owen County Soil and Water, Indiana DNR, Purdue Extension and Owen Valley Winery on Saturday, April 12th 1-3 PM at Owen Valley Winery (491 Timber Ridge Rd Spencer, IN 47460) to learn about the invasive Spotted Lanternfly and the effects it can have on Indiana vineyards. Click here for more information.

Spotted Lanternfly Identification, Control, and Management Plus Spotted Lanternfly Effects on Indiana Vineyards

Join Owen County Soil and Water, Owen Valley Winery, Indiana DNR, and Purdue University to learn about the Invasive Spotted Lanternfly!

Saturday, April 12th 2025 1-3pm Owen Valley Winery 491 Timber Ridge Rd, Spencer, IN 47460



Tree Fruit Success for Home

& Small Farm | Elkhart County

(Miranda Purcell, mrpurcel@purdue.edu)

Learn about tree fruit management from Dr. Peter Hirst, Purdue, and disease management from Dr. Melanie Lewis Ivey, The Ohio State University, on Wednesday, April 30th at 6:30 PM at Kercher's Sunrise Orchards (19498 CR 38 Goshen, IN 46526).

To register, call 574-533-0554 or email Mark Evans (mevans@purdue.edu).



TREE FRUIT SUCCESS FOR HOME & SMALL FARM

WEDNESDAY, APRIL 30TH 6:30PM

KERCHER'S SUNRISE ORCHARDS 19498 CR 38, GOSHEN, IN 46526

DETAILS OF TREE FRUIT MANAGEMENT FROM ROOT STOCK TO PRUNING DR. PETER HIRST PURDUE TREE FRUIT EXTENSION SPECIALIST

DISEASE MANAGEMENT IN TREE FRUITS DR. MELANIE IVEY, ASSOCIATE PROFESSOR FRUIT PATHOLOGY OHIO STATE UNIVERSITY

TO REGISTER, CALL 574-533-0554 OR EMAIL MEVANS@PURDUE.EDU Private Applicator Credits Available

ligion, color, sev, age, national origin or ancestry, genetic information, marital status, parental status, sexual tation, gender identity and expression, disability, or status as a veteran. If you are in need of accommodatic tend a program, please contact Mark Evans at 574-533-0554 or mevans@purdue.edu by April 16. If you ne an interpreter or translator, please Mark Evans at 574-533-0554 or mevans@purdue.edu by April 9.

and Plant Pathology, Entomology, and others by implementing and maintaining applied field research trials related to fruit, vegetable and specialty crops at the Samuel Meigs Horticulture Facility located within the Throckmorton Purdue Ag Center. Key responsibilities include: Interpreting research protocols, assisting with trial design and installation, managing field trials for a large variety of specialty crops, and creating and implementing disease and pest management practices.

For more information and to apply, follow the link:

https://careers.purdue.edu/job/Horticulture-Resea rch-Manager/36356-en_US

All Upcoming Events

(Miranda Purcell, mrpurcel@purdue.edu)

Spotted Lanternfly Identification, Control, and Management Plus Spotted Lanternfly Effects on Indiana Vineyards

Saturday, April 12th 1-3 PM at Owen Valley Winery (491 Timber Ridge Rd Spencer, IN 47460) Click here for more information.

Horticulture Research Manager

(Lori K Jolly-Brown, ljollybr@purdue.edu)

The Purdue Ag Center is seeking a Specialty Crops Systems Specialist. In this role, you will provide expertise and assistance to faculty and graduate students in the Departments of Horticulture and Landscape Architecture, Botany

Spotted Lanternfly Identification, **Control, and Management Plus Spotted** Lanternfly Effects on Indiana Vineyards

> Join Owen County Soil and Water, **Owen Valley Winery**, Indiana DNR, and Purdue University to learn about the Invasive Spotted Lanternfly!

Saturday, April 12th 2025 1-3pm Owen Valley Winery 491 Timber Ridge Rd, Spencer, IN 47460



Tree Fruit Success for Home & Small Farm Wednesday, April 30th at 6:30 PM at Kercher's Sunrise Orchards (19498 CR 38 Goshen, IN

46526)

To register, call 574-533-0554 or email Mark Evans (mevans@purdue.edu).



e University prohibits discrimination against any member of the University community on the basis of on, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sex ion, gender identity and expression, disability, or status as a veteran. If you are in need of accommoo d a program, please contact Mark Evans at 574-533-0554 or mevans@purdue.edu by April 16. If you an interpreter or translator, please Mark Evans at 574-533-0554 or mevans@purdue.edu by April 9.

WEDNESDAY, APRIL 30TH 6:30PM

KERCHER'S SUNRISE ORCHARDS 19498 CR 38, GOSHEN, IN 46526

DETAILS OF TREE FRUIT MANAGEMENT FROM ROOT STOCK TO PRUNING DR. PETER HIRST PURDUE TREE FRUIT EXTENSION SPECIALIST

DISEASE MANAGEMENT IN TREE FRUITS DR. MELANIE IVEY, ASSOCIATE PROFESSOR FRUIT PATHOLOGY OHIO STATE UNIVERSITY

TO REGISTER, CALL 574-533-0554 OR EMAIL MEVANS@PURDUE.EDU **Private Applicator Credits Available** It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. 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.

Facts for Fancy Fruit © Purdue University - fff.hort.purdue.edu Editor: Miranda Purcell | Department of Horticulture and Landscape Architecture, 625 Agriculture Mall Dr., West Lafayette, IN 47907