

VEGETABLE CROPS HOTLINE

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



Issue: 699
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Welcome to a New Year of the Vegetable Crops Hotline

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

Welcome to a new year of the *Vegetable Crops Hotline* (VCH), Purdue Extension's newsletter for people in the business of growing vegetables. As usual, we will have fifteen issues throughout the 2022 growing season. The first issue of the year is sent to all who subscribed to VCH via US-mail in 2021 as well as new subscribers for 2022. To continue receiving future copies through US-mail, renew your *Hotline* subscription using the form attached to this issue. The year that your subscription is paid through is on the bottom right-hand side of your envelope.

If you receive the issue through email, you will continue to receive the newsletters on the issue dates. In addition, you will receive emails if there are articles or

announcements that need your immediate attention. These articles will be posted under *Hot Topics* and be included in the next issue. All the previous articles published in VCH are available on the website.

Frequently we include links to websites or publications available on-line. If you aren't able to access these resources, please contact us or a local Extension office to request a hard copy of the information.

We hope you enjoy the newsletter, and have a happy and productive season in 2022.

Fusarium Wilt Challenges in Watermelon Variety Trial

(Wenjing Guan, guan40@purdue.edu, (812) 886-0198) & (Dan Egel, egel@purdue.edu, (812) 886-0198)

Fusarium wilt caused severe disease in our standard-size seedless watermelon variety trial in 2021. This is one of the most severe diseases in watermelon production in Indiana. The fungus survives in soils for many years without a host. Our seedless watermelon variety trial at Southwest Purdue Agricultural Center follows a four-year rotation. After doing the trial for almost 30 years, Fusarium wilt showed up a few years ago in the rotational lands. We have been trying to address the issue through fumigation and using drip-applied fungicide. None of the approaches has completely solved the problem. Since some of the varieties in the trial were very susceptible to the disease, even low disease pressure can cause significant damage. We are currently exploring new ground for future seedless watermelon variety trials. I hope the new land will give the variety trials a break from this disease



Fusarium wilt causing watermelon wilt in the 2021 watermelon variety trial at Southwest Purdue Agriculture Center

After evaluating watermelon varieties under the disease pressure for a few years at the Southwest Purdue Agricultural Center, it is clear that commercial watermelon varieties vary in their resistance/susceptibility toward this disease. However, information from both seed companies and university trials can sometimes be confusing. Part of the puzzle is due to the existence of multiple pathogen races. It is challenging to evaluate varieties or breeding lines for seed companies and university trials under the pressures of all races. Plus, the population of the pathogen could change over time. In a naturally infested field, the pathogen is distributed unevenly, thus such trials often fail to find significant differences.

At the 2022 Watermelon Research and Development Group meeting, Dr. Jonathan Schultheis presented watermelon cultivar incidence and yield response in North and South Carolina fields with Fusarium with of watermelon. The two locations evaluated the same nine popular seedless watermelon cultivars under disease pressure. We combined North and South Carolina results and what we have observed in Indiana from the past years. We are confident that Embassy and Fascination were relatively more resistant to the disease in field conditions. Traveler also did well under the disease pressures in Indiana, but the cultivar was not included in North and South Carolina trials. Shoreline and Joy Ride were more susceptible to the disease across all the trials. Grafted plants continue to be the most resistant plant compared to non-grafted varieties.

We hope the variety information is helpful for farmers who are struggling with Fusarium wilt. It is also important to understand that none of the seedless watermelon varieties are entirely resistant to all the races. A complete management approach will depend on integrated use of

multiple tools including variety selection, chemical control and rotation. Using grafted plants is probably the most reliable approach in controlling Fusarium wilt, but the cost of grafted plants makes the practice hard to be accepted by many watermelon farmers.

The full 2021 standard-size triploid watermelon variety trial report can be found at

<https://docs.lib.purdue.edu/mwvtr/228/>

Gummy Stem Blight Fungicides

(Dan Egel, egel@purdue.edu, (812) 886-0198)

3Gummy stem blight is an important disease of cucurbits in the Midwest. Gummy stem blight can cause lesions on leaves and stems of cantaloupe, watermelon and other cucurbits. Fruit lesions may be observed on pumpkin and, occasionally, on cantaloupe. Fruit lesions are known as black rot. Find more information about gummy stem blight and black rot [here](#).

Management of gummy stem blight includes crop rotation, fall tillage and sanitation in the transplant greenhouse. However, most growers use foliar fungicides to help manage gummy stem blight. Fungicides that are labeled for use on cucurbits for gummy stem blight include contact fungicides with the active ingredient chlorothalonil and mancozeb. Systemic fungicides that are labeled for use on gummy stem blight include those found in the table below.



Systemic fungicide for control of gummy stem blight, seen above, should be alternated between FRAC Codes.

Fungicide	REI/PHI*	FRAC code**
Inspire Super®	12/7	3, 9
Monsoon®, Onset®, Toledo®, Vibe®	12/7	3
Luna Experience®	12/7	7, 3

Miravis Prime®	12/1	7, 12
Quadris Top®	12/1	11, 3
Switch 62.5 WG®	12/1	9, 12

*Re-Entry period in hours/Pre-Harvest period in days

**FRAC code indicates the mode of action of the fungicide.

Recently, Dr. Anthony Keinath of Clemson University reported observing isolates of the gummy stem blight fungus that are resistant to fungicides with active ingredients in FRAC group 3 in South Carolina. That is, Dr. Keinath found isolates of the gummy stem blight fungus in South Carolina that were not inhibited by fungicides in FRAC group 3 as well as isolates had been inhibited in the past. In the table above, this includes Inspire Super, Monsoon and similar products, Luna Experience, and Quadris Top. Dr. Keinath tested isolates for fungicide resistance in the laboratory and in the greenhouse.

What does this mean to Indiana cucurbit growers? Until I am able to have isolates of the gummy stem blight fungus from Indiana tested, we won't know if we have the same problem with fungicide resistance. It is important to note that the resistance that Dr. Keinath found in the gummy stem blight fungus to fungicides with active ingredients in group 3 was not complete. That is, the resistance of the gummy stem blight isolates to group 3 fungicides observed in South Carolina is only partial. Group 3 fungicides apparently still work, just not as well. In addition, there are 3 species of the gummy stem blight and it is not clear which species has issues with fungicide resistance.

Here are my recommendations at this point.

1. Don't panic. We don't know if we have the same fungicide issues that are present in South Carolina. And, the weather in South Carolina is much different than in Indiana.
2. Always alternate fungicide modes of action (FRAC codes). It might be best to restrict use of group 3 fungicides to the first application. This makes sense because the PHI of group 3 is 7 days and therefore isn't easy to use close to harvest.
3. Always include a contact product such as chlorothalonil or mancozeb tank mixed with the group 3 fungicide.
4. If you think you have issues with control of gummy stem blight with group 3 fungicides, let me know.

I will monitor the situation. If I find out more about possible fungicide resistance issues in Indiana with gummy stem blight, I will advertise the findings right here. Meanwhile, contact me if you have any questions or comments.

Pesticide Information for 2022

(Dan Egel, egel@purdue.edu, (812) 886-0198)

As vegetable growers get ready for the 2022 season, one question might be to find up-to-date information about fungicides and how to apply them. Some possible resources are listed below.

- The *Midwest Vegetable Production Guide for Commercial Growers* offers recommendations for fungicides and other pesticides and practices that have been updated for the 2022 season. The guide, which is searchable online, can be accessed at mwveguide.org. When you go to mwveguide.org, you can search for solutions to your disease, insect or weed problem. These searches can be conducted on your laptop, tablet or phone. Once the search is complete, you can save the search and even print it out. Or you can find the PDF's for the guide and download and print them. Contact Dan Egel if you have questions about how to search the Production Guide on-line or download the PDFs.
- This year, hard copies of the *Midwest Vegetable Production Guide for Commercial Grower* are free. If you have questions about how to get a hard copy of the guide contact Dan Egel.
- Fungicide schedules for cucurbit growers can be found at the links below. This information has been updated for the 2022 season. Melon and watermelon information can be found [here](#). Pumpkin information can be found [here](#). If you have trouble accessing these sites or you would like a hard copy, contact Dan Egel.
- Purdue has a weather-based disease-forecasting system, known as **MELCAST**, developed by Rick Latin and run by Dan Egel. **MELCAST** lets growers schedule fungicide applications for cucurbits based on the weather. A table of what areas of Indiana are covered by **MELCAST** is located at [info](#). An extension bulletin about how to use **MELCAST** can be found [here](#). A record sheet to keep track of **MELCAST** information can be found [here](#). If you need hard copies of any of this information, contact Dan Egel.

Mini Seedless Watermelon Varieties




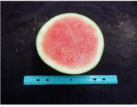














(Wenjing Guan, guan40@purdue.edu, (812) 886-0198)

We conduct standard seedless watermelon variety trials at Southwest Purdue Agricultural Center each year. In a separate trial, we evaluate mini seedless watermelon varieties. Mini watermelons refer to fruit ranging from 4.4 to 8.8 lbs, although the industry considers 6-7 lbs fruits ideal.

Fruit in a wide range of sizes is suitable to sell at local food markets.

Watermelon is a popular fruit in the summer. But watermelon may not be the top crop choice in small and diverse vegetable farms. Part of the reason is the ample space required to grow standard-sized watermelons and the labor needed to harvest the heavy fruit. In comparison, mini watermelons may provide a better choice.

At Southwest Purdue Agricultural Center, we grow mini watermelons on black plastic-covered beds spaced 6' apart, and in-row plant spacing 2' apart. Each plant takes about half of the area compared to standard-size seedless watermelons. Each mini seedless watermelon plant produces up to 6 or 7 fruit in a good year compared to 2-3 fruit of standard-sized seedless watermelon plant. Most mini seedless watermelons we have evaluated in our trials have outstanding fruit quality. The uniform and deep-red flesh are attractive when the fruit is cut open. They typically have high sugar content and firm flesh. In 2021, our mini seedless watermelon trials achieved outstanding yields. Below are the results and pictures of selected varieties evaluated in 2021. The full variety trial report can be found at <https://docs.lib.purdue.edu/mwvtr/227/>

Variety	Field picture	Internal fruit picture	Average fruit weight (lb)	Fruit number per plant
Ladybelle			5.4	5.3
Preakness			5.7	6.1
Cheetah			5.9	5.0
Nectaro			5.8	5.8
Excite			6.1	5.9
Sirius			5.9	5.3
Petite Perfection			5.1	6.3
Sugar Bomb			4	8.4
Sugar Rush			5.7	6.9

Mini seedless watermelon varieties evaluated at the Southwest Purdue Agriculture Center in 2021

Virtual Strawberry Chat

(Wenjing Guan, guan40@purdue.edu, (812) 886-0198) & (Miranda Purcell, mrpurcel@purdue.edu)

Are you interested in growing strawberries? Please join [Wenjing Guan](#), [Miranda Purcell](#), and our guests for virtual discussions about strawberry production at small and diversified farms. This event will take place at 12:00-1:00 pm EST on the first Wednesday of each month starting on March 2nd, 2022. Our discussion will focus on activities that happened at the time of the year and address arising questions.

The event is free. Please register at <https://purdue-edu.zoom.us/meeting/register/tJUrde-srT0oGN02uDtQXDJE5wtuGaz9Ikj5> After registration, you will receive an email with the first meeting invitation.

If you have questions related to strawberry production, please email them to Wenjing (guan40@purdue.edu) or Miranda Purcell (mrpurcel@purdue.edu). Your questions will help us determine discussion topics. We are looking forward to seeing you there!

The strawberry research at Southwest Purdue Agricultural Center is supported by North Central Region SARE, project number LNC21-454.

VIRTUAL STRAWBERRY CHAT

12-1:00 PM FIRST WEDNESDAY OF EACH MONTH STARTING MARCH 2ND



Chat with researchers and experts in strawberry production

Are you interested in growing strawberries? Join us for a virtual discussion about strawberry production at small and diversified farms.

Register here: <https://purdue-edu.zoom.us/j/902uDtQXDJE5wtuGaz9lkJ5>

After registering you will receive an email with the meeting invitation. If you have any questions related to strawberry production, please email them to Wenjing Guan (guan40@purdue.edu) or Miranda Purcell (mrpurcel@purdue.edu). Your questions will help us determine discussion topics.

Looking forward to seeing you there!



Purdue is committed to making its programs accessible to individuals with disabilities. If you require an accommodation or special assistance for this program due to a disability, please contact mrpurcel@purdue.edu

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Southwest Indiana Melon and Vegetable Growers Annual Meeting

Southwest Indiana Melon and Vegetable Growers annual meeting will be held in French Lick Resort & Casino on March 11, 2022, from 8:30 am to 4:00 pm. Topics include

- Research updates on nitrogen management in watermelon production;
- What do we know about growing strawberries on plasticulture system in southern Indiana;
- Extension produce food safety update;
- IPPM in watermelon: What worked and what didn't;
- Melon weed science research and herbicide update for 2022;
- Securing your load with chains and straps.

We will also discuss the future of the Southwest Indiana Melon and Vegetable Growers Association (SWIM). If you are a member of SWIM, please make an effort to participate in this years' meeting. Everyone is welcome to attend the meeting. \$15.00 per person will be collected at registration to join or renew your Southwest Indiana Melon and Vegetable Growers Association membership. Below is a detailed agenda of the event.

Private Applicator Recertification Program credits will be available for an additional \$10.00 per person and will be collected at the end of the **PARP session**. To receive credit, you must attend all the PARP sessions (1:30 -3:30 pm). Bring your PARP card or number with you. Please RSVP for this meeting no later than March 1, 2020. You can call the SWPAC office at (812) 886-0198 or email Barb Joyner (joynerb@purdue.edu) with reservations, including all those in your household or business that will be attending with you.

If you are interested in having a booth at the meeting, please see the ILLIANA web page at: https://illianawatermelon.com/iwasponsorship_ad/

Southwest Indiana Melon & Vegetable Growers Annual Meeting

Sponsored by SWIMVGA

French Lick Resort & Casino

8670 W. State Rd. 56
French Lick, IN 47432
888-936-9360

Friday - March 11, 2022

8:30 am - 9:00 am

Registration and Viewing of Exhibits

9:00 am - 9:30 am

Research updates on nitrogen management in watermelon production - Wenjing Guan, Purdue University

9:30 am - 10:00 am

What do we know about growing strawberries on plasticulture system in southern Indiana - Wenjing Guan, Purdue University

10:00 am - 10:30 am

Introduction of commercial exhibitors

10:30 a.m.-11:00 am

Extension produce food safety update
- Scott Monroe, Purdue University

11:00 am - 11:30 am

Discussion of the future of Southwest Indiana Melon and Vegetable Growers Association (SWIM)

11:30 am - 1:30 pm

Lunch (included with \$15 registration) - View Exhibits

1:30 pm - 2:00 pm

IPPM in watermelon: what worked and what didn't - Ashley Leach, The Ohio State University

2:00 pm - 2:30 pm

Melon weed science research and herbicide updates for 2022 - Steve Meyers and Jeanine Arana Cordonero, Purdue University

2:30 pm - 3:30 p.m.

Securing your load with chains and straps - Fred Whitford, Purdue University

3:30 pm - 4:00 pm

Sign PARP sheet

Don't forget to sign the pesticide form (PARP) at the end of the meeting.

PARP and CCH credit is pending.

(Must attend program from 1:30 pm to 3:30 pm to receive Private Applicator Recertification credit.)

2022 Indiana Small Farm Conference Switches to Virtual Amid COVID Concerns

The 2022 Indiana Small Farm Conference – Indiana’s premier annual event for the state’s small and diversified farming community – has made the decision to pivot to a virtual platform amid the state’s high numbers of COVID cases.

“All of us from Purdue Extension were looking forward to spending time with farmers, colleagues and friends this March at the Indiana Small Farm Conference,” said Nathan Shoaf, urban agriculture coordinator and conference committee member. “We waited as long as we could before making the decision to pivot from an in-person conference to a virtual one, but we determined it was the safest path forward for everyone.”

The 10th annual conference will offer free webinars and keynote speaker videos to all who [register](#).

“We hope to interact with many past conference participants, as well as those who are attending for the first time,” Shoaf said. “Thank you to all of the farmers, vendors and sponsors who make this an incredible conference year after year.”

[Malik Kenyatta Yakini](#), co-founder and executive director of the Detroit Black Community Food Security Network, will keynote at 11:30 a.m. ET, March 3. Genesis McKiernan-Allen and Liz Brownlee, co-founders of the [Hoosier Young Farmer Coalition](#), will also present keynote remarks for the conference.

Since 2013, the Indiana Small Farm Conference has featured comprehensive programming about diversified farming and local food systems, bringing together novice and experienced small-scale farmers.

“I am confident our excellent team of educators and farmers will deliver high-quality online content to help you continue to farm throughout this uncertain time,” says Mike Hoopengardner, owner of Redbud Farm and [Caprini Creamery](#) and ISFC committee member. “Please join us virtually for the 10th annual Indiana Small Farm Conference.”

This year’s free conference offers 10 tracks from which attendees can choose sessions that best align with their farming operations and goals:

- Vegetable Production
- Livestock Production
- Marketing
- Urban Agriculture
- Regenerative Agriculture
- Value Added

- Soil Health
- Pollination Management
- Perennial Crop Production
- Innovations in Response to Climate Change

A detailed conference schedule will be available, and currently scheduled sessions are subject to change. For more information, or to register, visit the Indiana Small Farm Conference website at purdue.ag/sfc. Follow the conference on Twitter and Instagram at @SmallFarmPurdue or on Facebook at @PurdueExtensionSmallFarms, with the hashtag #PurdueSmallFarms.

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Fungicide Regulation Proposals

The Environmental Protection Agency (EPA) has proposed the following label changes including some use cancellations to the fungicides listed below. These fungicides mostly affect fruit growers; however, we include them here since many vegetable growers also grow fruit crops.

Ziram, all conventional uses are proposed for cancellation.

Thiram, all non-seed treatment uses proposed for cancellation.

Ferbam, multiple specialty crop uses proposed for cancellation.

Iprodione, cancellations of uses for dry and succulent beans, caneberries and bushberries as well as other uses. A rate reduction has also been proposed for grapes.

To review the information used to develop the proposed interim decisions, see the links below.

Thiram: <https://www.regulations.gov/document/EPA-HQ-OPP-2015-0433-0091>

Ziram: <https://www.regulations.gov/document/EPA-HQ-OPP-2015-0568-0058>

Ferbam: <https://www.regulations.gov/document/EPA-HQ-OPP-2015-0567-0028>

Iprodione: <https://www.regulations.gov/document/EPA-HQ-OPP-2012-0392-0056>

To add a comment on one or more of these proposals, go to: <https://www.federalregister.gov/documents/2022/02/03/2022-02197/pesticide-registration-review-proposed-interim-decisions-for-several-pesticides-notice-of>

The comment period ends in April of 2022.

Sign Up 2022 Census of Agriculture

The Census of Agriculture is a complete count of U.S. farms and ranches and the people who operate them. Even small plots of land – whether rural or urban – growing fruit, vegetables or some food animals count if \$1,000 or more of such products were raised and sold, or normally would have been sold, during the Census year. The Census of Agriculture, taken only once every five years, looks at land use and ownership, operator characteristics, production practices, income and expenditures. For America's farmers and ranchers, the Census of Agriculture is their voice, their future, and their opportunity.

Sign up for 2022 Census of Agriculture. Let your voice be heard!

<https://www.agcounts.usda.gov/static/get-counted.html>

Calling on Indiana Vegetable Producers: Tell us more about insect management in your crops!

(Elizabeth Long, eylong@purdue.edu, (765) 796-1918)

Researchers at Purdue University and The College of Wooster are conducting a study to learn more about insect pest management practices used by vegetable producers in the Great Lakes and Mid-Atlantic regions of the US. Although there is a key insect we're curious about (the carrot weevil), you'll only see 1 question about it; the majority of the survey questions focus on which insects are problematic for vegetable growers and how you approach insect pest management in your production system – whether it's small or large, conventional or organic. The information shared will help direct pest management research and extension programs in specialty crop production in our region.

The survey will take approximately 20-25 minutes to complete and in appreciation of your participation, you can choose to enter into a raffle for a FREE hardcopy of a commercial spray guide!

For more information about the survey and to access it online, please visit:

https://wooster.col1.qualtrics.com/jfe/form/SV_3xiiW46yUrGrZrM

Six Pillars of Farm Risk Management

PARTICIPANTS EARN A PURDUE CERTIFICATE
SIX PILLARS OF FARM RISK MANAGEMENT

Join a great team of Extension educators, specialists, faculty, and a lawyer as we present The Six Pillars of Farm Risk Management. This online course allows participants to earn a Purdue certificate! Open enrollment is available through November 2022, but early enrollment is encouraged. The Six Pillars of Farm Risk Management will encompass a process to mitigate, transfer, and avoid risks in production, marketing, financial, legal, human resource, and social media. This 6-week online course incorporates all six pillars of contingency planning through online modules, recorded videos, and webinars with participants that can be delivered nationwide. At the end of the course, farms and agribusinesses will have written contingency plans and policies for each of the 6 pillars. Contingency plans will help businesses efficiently recover from disruptions or disasters. Through this program, managers, owners and key employees will be better prepared for disruptions and disasters that their business and/or family will inevitably encounter.

COST: \$49

REGISTER AT: [BIT.LY/3FK14QH](https://bit.ly/3FK14QH)

OPEN ENROLLMENT THROUGH NOVEMBER 2022

The poster is for the "Six Pillars of Farm Risk Management" course. At the top, it says "COST: \$49" and "OPEN ENROLLMENT THROUGH NOVEMBER 2022". The title "SIX PILLARS OF FARM RISK MANAGEMENT" is prominently displayed. Below the title are six circular icons representing different aspects of farm risk: a cow, a person, a field, a person, a field, and a person. Below the icons, it says "PARTICIPANTS EARN A PURDUE CERTIFICATE". There is a paragraph of text describing the course and its benefits. At the bottom, it says "PURDUE UNIVERSITY" and "EXTENSION". The registration link "REGISTER AT: [BIT.LY/3FK14QH](https://bit.ly/3FK14QH)" is at the bottom.

Hiring Horticulture Crops Research Manager at Throckmorton Purdue Ag Center

The Throckmorton Purdue Ag Center located in Lafayette, IN is hiring a Horticulture Crops Research Manager. The person will play important roles in managing vegetable, fruit and other specialty crop research at Purdue. Below is the detailed job description. If you know anyone who is

interested and qualified for the job, please encourage them to apply through the link

<https://careers.purdue.edu/job-invite/18246/>

Job Summary

The Horticulture Crops Research Manager will provide expertise and assistance to faculty and graduate students in the Departments of Horticulture and Landscape Architecture, Botany and Plant Pathology and Entomology and other departments within the College of Agriculture. Overall management of field operations including 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. You will be responsible for interpreting research protocols, assisting with trial design and installation, managing yearly field research rotations and making and implementing disease and pest management practices.

Additional duties include:

- Effectively communicate and work with researchers and others conducting field trials at the Meigs Horticulture Facility
- Utilize knowledge of field plot design, statistics and information about the assets available to conduct research to assist in successful plot design and data collection
- Utilize knowledge of field plot research to manage overall production of fruit, vegetable and specialty crops being grown in the field trials
- Communicate field trial protocols to ag center staff and work closely with lead principle investigators to achieve successful results
- Provide field scouting to monitor disease and pest management needs of each field trial
- Work closely with ag center Superintendent to maintain adequate supplies of crop inputs, pest management products, field trial supplies and equipment on an annual basis
- Engage in professional development opportunities to enhance knowledge of crop production techniques, field trial methods and technology advancements.
- Provide timely updates to faculty utilizing the ag center for their research efforts
- Participate in the planning and implementation of various field days, grower workshops and specialized field events at the ag center organized by lead researchers presenting data and plot results the growers in Indiana
- Participate in the presentation of research results developed at Meigs during afore mentioned events
- Assist ag center staff in the overall operation of the ag center. This includes rotation field crop production,

maintenance of equipment, buildings and infrastructure of the ag center

Required:

- Bachelor of Science in Horticulture or related area
- 4 years of related experience
- Knowledge in the design, management, and overall care of vegetable, fruit tree, and specialty crop field studies
- Ability to exercise independent judgment and problem solve
- Ability to develop and maintain continuous working relationships
- Basic computer skills, good communication, and ability to operate farm equipment
- Ability to assist with horticultural extension outreach programs
- This position requires that a commercial pesticide applicator license obtained within 12 months of employment.
- Valid U.S. or Canadian driver's license
- Travel

Above-normal Precipitation and Temperature Expected into Spring

(Beth Hall, hall556@purdue.edu)

February has brought all kinds of precipitation to the state and now conditions are muddy if not flooded. Will this continue? The national Climate Prediction Center just released their 1-month and 3-month climate outlooks for March and March-May periods, respectively. Both are conveying the same story, which is heavily influenced by our ongoing La Niña event. There is significant confidence that temperature for these time periods will average above normal and precipitation will be above normal (Figures 1 and 2). Therefore, anticipate saturated soils as conditions begin to thaw progressing into spring. Flooding may continue to be a concern. For the March-through-May period, while outlooks are favoring above-normal precipitation, this is in consideration of the full 3-month period being averaged. It is possible that this translates to the earlier weeks of that period being wetter than the later weeks. However, due to La Niña continuing (though weakening) into the spring, this chance is not too likely, but there is always hope.

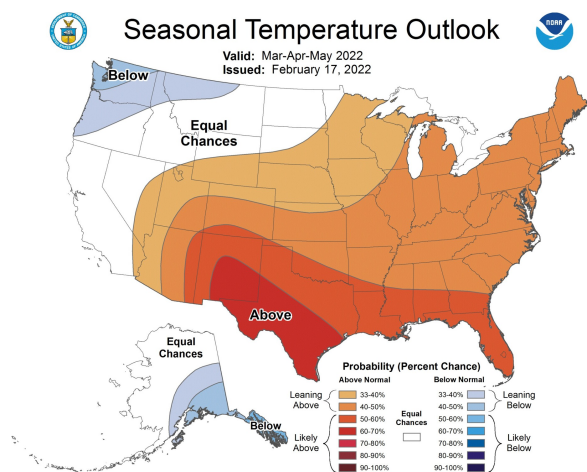


Figure 1. The temperature outlook for March-April-May presented as the level of confidence for above- or below-normal temperature.
Source: NOAA Climate Prediction Center

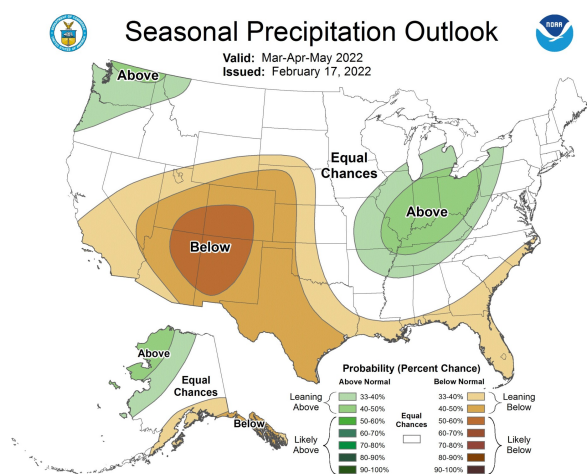


Figure 2. The precipitation outlook for March-April-May presented as the level of confidence for above- or below-normal precipitation.
Source: NOAA Climate Prediction Center

As usual, the past few months have felt like a roller coaster ride regarding climate. November was particularly dry with cooler-than-normal temperatures. While possibly ideal for some agricultural considerations, this raised some concerns that drought may be developing. However, December was considerably warmer than normal with above-normal precipitation (with the exception along the Ohio River). This was a more typical La Niña pattern where the winter season is often warmer and wetter than normal. The La Niña was fully established by this point, so the assumption was that temperatures would stay mild and warm with precipitation likely falling more as rain than snow until later in the season. Unfortunately, January was remarkably dry and seasonably cool. Could the La Niña outlook have been wrong? February decided to declare that winter was not over yet and La Niña events typically shine strongest in February. Alas, this month we have seen lots of rain, ice, sleet, and snow. Temperatures have been cooler than normal – which has helped bring the snow we had been missing so far this season – reminding us all (along with our faithful groundhog) that winter is not over yet.

For agriculture though, the big question will be how long with this all last and will we be looking at a cool, wet spring much like 2019, or will La Niña fade away and bring a typical Indiana spring with strong variability in both temperature and precipitation? Currently, climate outlooks into April are showing confidence in above-normal temperature and above-normal precipitation. It is too soon to know how this will translate come planting time, so for now we must continue cuddling up in our warm blankets and watch the next winter storm event as it reminds us that Mother Nature can be more determined than we are.

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