

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, (765) 496-7955)

Welcome to the [Vegetable Crops Hotline \(VCH\)](#), Purdue Extension's exclusive newsletter for people in the business of growing vegetables.

In this issue, we highlight watermelon recovery after hail, Honeyvine Milkweed, and provide an update on vegetable pricing at the Clearspring Auction. Included are lots of information about educational opportunities at the Pinney Purdue Agricultural Center (August 10 and August 24). We have saved a place just for you. Registration details for the Pinney Purdue Ag Center field days are now available. Register now to reserve your spot. Registration links are available in this issue and on the EVENTS tab of the Vegetable Crops Hotline Newsletter webpage. In addition, we are looking for sweet corn growers who are interested in submitting their sweet corn varieties in a taste test. More information is available in the newsletter.

On July 20, 2023, we had a very successful field day at Meigs, Lafayette. The Purdue Fruit and Vegetable Field Day attracted 74 attendees. Attendees visited eight demonstrations and had ample time to interact with growers, specialists, students, and Educators. Below are some pictures.



Figure 1. Laura Ingwell provides sweet corn pest management updates (Photo by John Obermeyer).



Figure 2. Petrus Langenhoven and Nathan Shoaf discuss soil health and pepper production (Photo by John Obermeyer).



Figure 3. Josue Cerritos talk about silage tarps for weed management in potatoes (Photo by John Obermeyer).



Figure 4. Elizabeth Long discussed insect management in Collards (Photo by John Obermeyer).



Figure 5. Leslie Aviles discussed high tunnel crop diversification and biological control (Photo by John Obermeyer).

At the field day, we also said goodbye to Paul Howard. Paul worked for 35 years at Purdue, first for the Department of Horticulture and Landscape Architecture and later for the Throckmorton/Meigs Purdue Ag Center. Paul is a hard worker and will be missed. He is now going to devote all his attention to his farm and family. We wish you all the best, Paul!



Figure 6. From left to right. Peet, Chloe, Paul, Jay and Tristand (Photo by Chloe Richard).

Website links

Frequently we include links to websites or publications that are available online. If you can't access these resources or can't see the web address, don't hesitate to contact your [local Extension](#)

[office](#) or us to request a hard copy of the information.

Remember that all previous articles published in the VCH newsletter are available on the VCH website vegcropshotline.org.

We would like to hear from you.

ANR Educators and Growers, reach out to us if you are experiencing a vegetable production-related issue you think other growers need to know of. Remember, we have a great Horticulture Team that can assist you. A complete list is available [HERE](#).

Send us pictures of success stories, activities, or issues in your county or on your farm. Please include a description and provide the name of the person that needs to get credit for the picture. These pictures could be used in future *Vegetable Crops Hotline Newsletter* articles. Submit your stories [HERE](#).

Do not hesitate to contact me, Petrus Langenhoven, at plangenh@purdue.edu if you have any questions or suggestions to improve the newsletter.

Enjoy reading this issue!

Watermelon Recovery from Hail Damage, Suggestions from Bob Hochmuth

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

There are many challenges in growing watermelons. Hail occurring right before harvest time is undoubtedly one of them. In the past weeks, there have been thunderstorms in southern Indiana. Some brought hail. Small hail causes minor damage to watermelon leaves and stems, but big hail can devastate the foliage and cause significant scarring to the fruit (Figure 1). Unfortunately, this happened to a few watermelon fields right before harvest. It is heartbreaking to see the area after being hit by the hail. We hope to help reduce the loss as much as we can. Here are some suggestions from Bob Hochmuth in his article published after the hail damage in May 2023 in FL. Bob is the IFAS Regional Specialized Extension Agent for commercial vegetable crops serving the Northeast Extension District of Florida.



Figure 1. Hail damage on a watermelon fruit (Photo by Wenjing Guan).

Below was written by Bob in the Weekly Issue of UF/IFAS

Extension Suwannee Valley Watermelon Crop Update published on May 22, 2023.

There are a couple primary considerations for fields with hail damage; one is to protect the damaged foliage with fungicides and the second is to protect the now-exposed fruit from the risk of sunburn. As far as protecting the damaged foliage from disease, it is recommended to use a broad-spectrum material such as mancozeb (Manzate®, Penncozeb®, 5-day preharvest interval) or even Inspire Super® (7-day preharvest interval) or Aprovia Top® (0-day preharvest interval), especially if these fungicides are due in the spray schedule anyway. It may also be useful to add a low rate of copper for secondary bacterial infections on the foliage and stems, but good coverage will be necessary. I would also caution against any mid-daytime sprays in these fields due to higher risks of burn. Often after hail has damaged the leaf canopy, the fruit will suddenly be very exposed and more vulnerable to sunburn, so applications of materials like kaolin clay and other sun-shielding materials will be advised; however, these materials should not be sprayed with fungicides or other chemicals. Spray with water only and according to label directions. The coatings may need to be significant to protect the exposed fruit. Further consideration may be needed regarding fertilizer management in these fields. This is a harder one to call because of the wide variation in fields this time of year. However, considering the plants may have lost a lot of leaves and photosynthesis capacity, we may need to try to keep the plants growing to produce new foliage, depending on the age of the crop and the extent of the damage. It is likely fertigation will be needed in the range of 2.0- 2.5 lbs of N per acre per day. Note watermelon plants can't use more than the rate of about 2.5 lbs per acre per day, so don't push them harder than they can respond. The bottom line is that if the fruit is still marketable, the crops have a chance to be repaired and get those fruit to market, but time is of the essence. The final recommendation here is to take good notes on what happened and when it happened. Take many photos to document things and most importantly, report the incident immediately to those who need to know, local FSA office, crop insurance company, if insured, etc.

Clearspring Produce Auction Price Update

(Jeff Burbrink, jburbrink@purdue.edu) & (Petrus Langenhoven, plangenh@purdue.edu, (765) 496-7955)

The Clearspring Produce Auction is located just 2 miles south of US 20 in Clearspring Township in the Heart of the LaGrange-Elkhart Amish Settlement. It is within easy driving distance of the towns of Shipshewana, Topeka, Emma, and LaGrange.

Produce is sold 3 days a week throughout most of the growing season (Tuesday, Thursday, Friday), with a hay sale on Saturdays. Office hours are Monday and Wednesday, 1 to 4 pm, and Tuesday, Thursday, and Friday, 8 am to 4 pm. An auction report can be heard by calling (260) 463-4131. Besides the produce and hay auctions, Clearspring has an equipment and supply business

operating onsite for growers.

Are you curious about vegetable pricing?

In an effort to communicate more market information, we are publishing Clearspring Produce Auction volumes and prices for the past two weeks. You will be able to view volumes and pricing below:

[July 13, 2023](#)

[July 14, 2023](#)

[July 18, 2023](#)

[July 20, 2023](#)

[July 21, 2023](#)

[July 25, 2023](#)

Honeyvine Milkweed

(Stephen Meyers, slmeyers@purdue.edu, (765) 496-6540)

What is it?

Honeyvine milkweed (*Cynanchum laeve*) is a perennial, deciduous, vining member of the milkweed family *Asclepiadaceae*. It is native to the United States and can serve as a host for monarch butterfly larvae. Honeyvine milkweed tends to be more problematic in production systems with reduced or no tillage, including perennial fruits. It can also be more problematic in field edges near fencerows.

Identification

The growth habit of honeyvine milkweed is trailing, but once it encounters an upright object (other plants, fences) it becomes an upright, twining vine (Figure 1). Plants lack tendrils and instead climb upright objects by a process known as **nutation**, tightly encircling an object (Figure 2).



Figure 1. Honeyvine milkweed becomes an upright twining vine when it encounters other plants, fences, etc. (Photo by Stephen Meyers).



Figure 2. Plant lacks tendrils and instead climb upright, tightly encircling an object (Photo by Stephen Meyers).

Stems are thin and may reach 10 feet or more. When stems are broken, they may exude a white sap.

Leaves are heart-shaped and appear in pairs, one each on opposite sides of the stem. Primary leaf veins are distinctly white.

Small, white, tube-shaped flowers appear in clusters in mid-to-late summer and are followed by tear-drop-shaped, green “pods” (follicles). The seed “pods” resemble those of common milkweed but are smooth in appearance. Like common milkweed, the seed “pod” will split at a single suture, revealing flat brown seeds.

Belowground, honeyvine milkweed taproots reach to at least 6 feet deep, and the plant has an extensive network of lateral roots. Roots contain buds capable of producing new shoots (Figure 3). The ability of root fragments to regenerate successfully varies with fragment size and depth. Generally, larger and shallowly buried root fragments are more likely to generate new shoots and successfully establish and grow compared to small and deeply buried root fragments.



Figure 3. Roots contain buds capable of producing new shoots (Photo by

Management

Seed germination under field conditions is generally less than 60%. If seedlings are present, they should be removed before 5 weeks of age. At this point, seedlings are capable of producing root buds that can sprout and regenerate the plant (Coble and Slife, 1970).

In annual production systems, tillage can be used to suppress honeyvine milkweed. Repeated cultivation will be necessary to eradicate established plants.

Herbicides can suppress honeyvine milkweed but often do not provide complete control. Research from the University of Kentucky suggests that pre-emergence applications of flumioxazin, oxyfluorfen, norflurazon, and simazine can provide 4 to 5 weeks of control in fruit production systems (Masabni 2007). Auxinic herbicides, including fluroxypyr and 2,4-D, can provide suppression as well. Fomesafen, acifluorfen, lactofen, glufosinate, and basagran can kill the top growth but will not affect roots. Control with glyphosate is variable and often requires repeated applications. Consult the Midwest Vegetable Production Guide (<https://mwveguide.org/>) and the Midwest Fruit Pest Management Guide (<https://ag.purdue.edu/departments/hla/extension/sfg-sprayguide.html>) to determine recommended herbicides for your specific crop. Herbicides should target emerging or trailing plants before they start to climb up the crop. This allows for more targeted weed control and lower use rates.

References

- Coble, HD and FW Slife. 1970. Development and control of honeyvine milkweed. *Weed Science*. 18:352-356. DOI: <https://doi.org/10.1017/S0043174500079960>
- Masabni JG. 2007. Honeyvine milkweed control in tree fruits, small fruits, and grapes (HO-85). University of Kentucky Extension Service.

Heat Continues through the Near Future

(Hans F Schmitz, hschmitz@purdue.edu, (812) 385-3491)

As the dog days of summer continue in folklore through August 11, the temperatures and humidity have increased to heat advisory status throughout the weekly outlook. Figure 1 shows the average temperatures over the last week, reaching into uncomfortable territory.

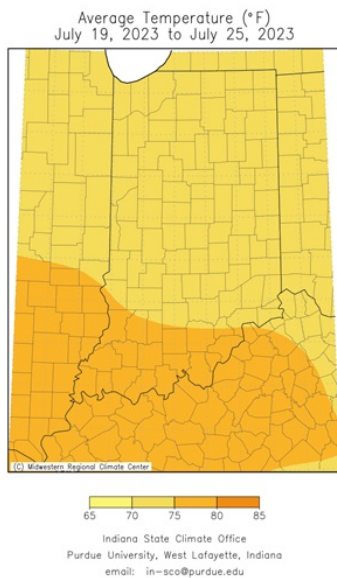


Figure 1. Average temperatures in the 70s correlate to high temperatures in the 80s and 90s across the state, with minimums in the 60s and 70s.

Outlooks for temperatures in the 6-10 day and 8-14 day show a probability for above normal temperatures persisting.

Meanwhile, much of the state received below normal precipitation in the past week (Figure 2).

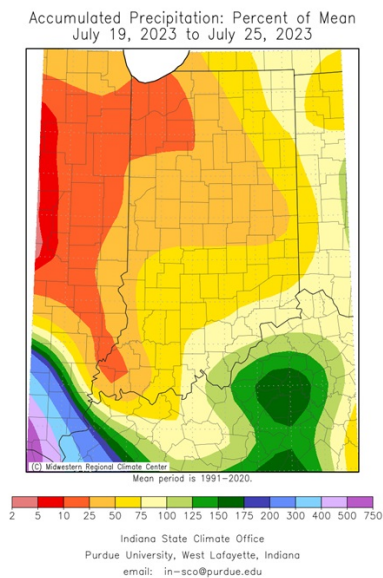


Figure 2. Shows most of the state with below normal precipitation over the last week.

Although rainfall a couple of weeks ago allowed for improvement in the Indiana portion of the drought monitor, evapotranspiration has increased along with the recent relative lack of rainfall. Supplemental irrigation should be at the ready, keeping in mind that early morning irrigation allows any moisture that might have accumulated on leaf surfaces to dry quickly before diseases can establish.

The seasonal outlook released on July 20 from the Climate Prediction Center show any drought that currently exists in Indiana to be removed by the end of the forecast period on October 31. In the meantime, it is summer and will continue to act as such. The National Weather Service has no anticipated

risks of heavy snowfall anywhere in the United States through August 9.

Pesticide Core Exam now also in Spanish

(Leo Reed, reedla@purdue.edu)

Office of Indiana State Chemist will be offering the Pesticide Core Exam in Spanish starting Monday, July 24th.

Passing the Pesticide Core Exam is required for individuals wanting a Private Applicator Permit (Farmer License).

The Spanish Core Exam can be scheduled at <http://indiana.metrosignup.com/>

If you have questions, contact Leo Reed at the Office of Indiana State Chemist at (765) 494-1588 or email reedla@purdue.edu

Sweet Corn Growers

(Phil Woolery, pwoolery@purdue.edu)

We are looking for sweet corn growers to participate in our 2023 Twilight Vegetable Meeting and Sweet Corn Tasting. Our Meeting on August 24 at Pinney Purdue Ag Center in Wanatah will feature information on pumpkins, pepper, sweet corn, compost, and tomatoes. The event will also include information for consumers/homeowners on Vegetable Gardening, and Private applicator recertification credits (PARP) are anticipated. **This event includes a sweet corn variety tasting.**

If you would be willing to donate 2 ½ dozen ears of corn, please get in touch with Phil Woolery to arrange pick-up/drop-off arrangements. We need to know of your interest in participating in this by August 2 in order to acknowledge you during the program. We also will provide a listing of all locations to participants so that they can visit you after the program. Please pick corn the morning of August 24 and deliver it unshucked to an arranged location (Pinney Purdue Ag Center or County Extension Office before noon. Including the variety name is optional. Please include the name of your farm/farm stand and location. We will have the taste testing results available after the program if you wish to receive them.

If you have questions, contact Phil Woolery (Ag and Natural Resources Extension Educator, Starke and Pulaski Counties) at (574) 772-9141 or (574) 946-3412, or email him at pwoolery@purdue.edu

Vegetable Equipment Demonstration, Produce Safety, and ServSafe for Home Based Vendors at Pinney Purdue Ag Center August 10th

(Liz Maynard, emaynard@purdue.edu, (219) 548-3674)



(Photo by Liz Maynard)

Vegetable equipment for small farms will be demonstrated on August 10, from 9 a.m. to 12 p.m. Central Time, at the Pinney Purdue Agricultural Center. Market gardeners, urban farmers, home and community gardeners are invited to attend and learn about equipment and tools for seeding, planting, weed management, and tillage. Demonstration equipment will include a Jang seeder, paperpot transplanter, wheel hoe, tine weeder, tilther, BCS walk-behind tractor, and more. Lunch sponsored by Johnny's Selected Seeds and Safe Produce Indiana will follow the demonstration.

Attendees may stay for the afternoon Food Safety Day from 1 p.m. to 4 p.m. and learn about testing water used in vegetable growing and Good Agricultural Practices, or attend a ServSafe program and get a certificate required for Home Based Vendors.

There is a fee for the ServSafe program but no charge for the morning program or other afternoon programs.

Register here: <https://tinyurl.com/VegWater2023>

Register for ServSafe by August 3, 2023. Payment (\$40): <https://cvent.me/gvLOM9>

To register or if you have other questions, please get in touch with Rebecca Koetz at busser@purdue.edu or (219) 755-3240.



(Photo by Liz Maynard)

Pumpkins, peppers, sweet corn, compost, tomatoes, and more will be discussed at the August 24th Vegetable Twilight Meeting at Pinney Purdue Ag Center, 5 to 8 p.m. Central Time. Vegetable farmers, market gardeners, urban farmers, and home gardeners are invited to tour trials and hear from researchers and educators about weed management in pumpkins; key tips for pepper production; no-till sweet corn; compost and its interaction with soil micro-organisms, plant disease, and plant nutrition; managing insects in high tunnels/hoophouses; and managing diseases of pumpkins and tomatoes. There will be sweet corn tasting after the program. Pinney Purdue Ag Center is located at 11402 S. County Line Rd., Wanatah, Indiana.

To register or if you have other questions, please get in touch with Nikky Witkowski at (219) 465-3555 or nikky@purdue.edu. Please register by Monday, August 21, 2023.



(Photo by Liz Maynard)

Vegetable Twilight Meeting at Pinney Purdue Ag Center on August 24th

(Liz Maynard, emaynard@purdue.edu, (219) 548-3674)

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