PURDUE UNIVERSITY

FACTS FOR FANCY FRUIT

Issue: 25-11
September 4, 2025

A Newsletter for Commercial and Advanced Amateur fruit growers.

In This Issue

Crop conditions

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

Harvest is in full swing. Watermelons are midway through their run, blackberries continue to ripen up, Pixie Crunches and Honeycrisp apples are beginning to ripen. Pawpaws have another week until maturity for most varieties. Many varieties of grapes are reaching full maturity. The cooler weather, although welcome for our comfort, has caused some crops to slow maturation/production. This is most evident in our vegetable crops, but has also been observed in the watermelons.

Blackberry: Mature fruit

Plum: Fruit maturation

Pawpaw: Fruit maturation

Pear: Fruit maturation

Grapes: Veraison/ Maturity

Apple (Pixie Crunch): Fruit maturation

Abnormally Dry and Drought Conditions Are On The Rise

(Jacob Dolinger, jdolinge@purdue.edu)

If you have any stakes in agriculture, you may have noticed a fairly rapid drying trend as summer has come to a close. According to the U.S. Drought Monitor on September 2, 76 percent of Indiana is considered abnormally dry—up from just 26 percent one week earlier. Moderate drought conditions have also expanded from less than 1 percent on August 26 to over 7 percent on September 2. The driest conditions are in several counties along the Ohio River in southwestern Indiana, as well as sporadically across northern Indiana and along the Illinois-Indiana border.

Meanwhile, 30-day precipitation is fairly lacking—especially across northern Indiana. Several counties around Indianapolis and to the north and east have seen less than 25 percent of their normal precipitation totals since August 4. Even across southeastern Indiana, conditions have rapidly become drier over the course of the final weeks of August. Only a few counties across southwestern Indiana and Northwest Indiana have observed near to above normal precipitation.

Soil moisture forecasts do not bode well for improving conditions. Anomalies are at least 40-80mm below normal across northern Indiana in the coming weeks. The 8–14-day precipitation outlook for the September 11-17 period is leaning toward below normal precipitation, especially for eastern Indiana, and equal chances for above normal and below normal precipitation through the end of the month. The U.S. Drought Monitor has accounted for this, with drought development likely across almost the entire state into September. Precipitation totals across Indiana tend to decrease slightly in September before increasing again in October and November, so it will be crucial to monitor soil conditions as we head through the Fall months.

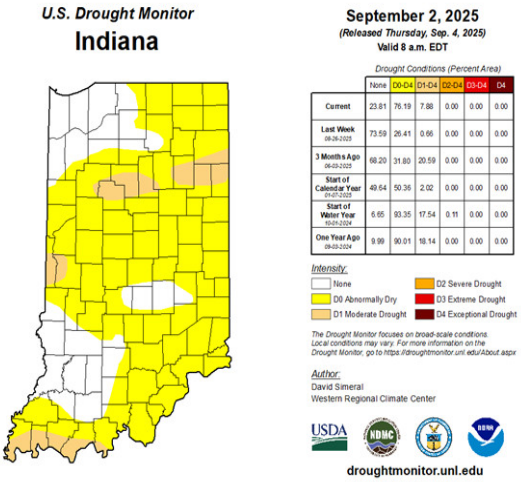


Figure 1: Three-fourths of the state are now abnormally dry, while several counties are also dealing with moderate drought conditions, as indicated by tan shading.

Dogwood borer injury to apple trees

(Elizabeth Yim Long, elong@purdue.edu)

Figure 1. Female dogwood borer on a leaf. Photo credit: Chris Joll, 2024. Bugguide.net

I am hearing from apple growers and my entomology colleagues in neighboring states that the dogwood borer is becoming a more common insect pest to monitor and manage in apple orchards. So, in this issue of Facts for Fancy Fruit, I'll share some general tips to help you stay ahead of this damaging fruit tree pest.

What is the dogwood borer? A clear-wing moth that at first glance, may be mistaken for a wasp, given its black and yellow coloration (Figure 1).

What orchard trees does it attack? Apples and plums, but it can also feed on many different forest trees.

Which life stage causes the damage? As with most moth pests, it is the caterpillar that causes injury to trees.

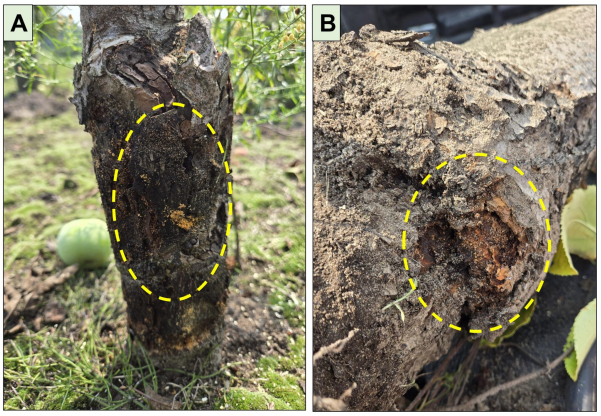


Figure 2. Examples of dogwood borer caterpillar injury to apple trees. Repeated years of infestation leads to obvious, severe injury and girdling of trees (A), while early infestations may not be as obvious, but note presence of reddish, sawdust-like frass (B). Photos: E. Y. Long

Why is it so damaging? This insect spends most of its life (more than one year!) as a caterpillar, feeding preferentially in burr knots (adventitious roots) around the graft union of the tree (Figure 2), then moving below the bark. Injury can be easy to miss because caterpillars are out of sight! This is where the dogwood borer can be a really insidious pest: if trees are not inspected closely, it can be easy to miss signs of the caterpillars year after year, until they have girdled the tree. Moreover, there is evidence that previously-infested trees are more attractive to female moths for egg laying, so failing to detect infestations early can lead to increasing pressure (caterpillar load) on already injured apple trees. Generally, decline due to dogwood borer is slow, requiring several years of infestation to kill apple trees (Figure 3).

Figure 3. A healthy apple tree (left) versus an apple tree in decline (right) due to repeated years of infestation by dogwood borer caterpillars. Photo: E. Y. Long

Helpful tips to help you stay ahead of this insect. Keep the area around the lower trunk and graft union weed-free and open to sunlight as much as possible. This makes the tree less hospitable to female moths and reduces development of burr knots, respectively, on

rootstocks prone to burr knot development.

In the spring, look for signs of caterpillars beneath tree guards. Pay special attention to burr knots and look for reddish, sawdust-like caterpillar frass (solid waste) on the bark (Figure 2). Remove tree guards when they are no longer needed, as these can provide protective shelter for egg-laying females and the developing caterpillars.

If there is a history of dogwood borer injury in your orchard, or if you are unsure, use pheromone traps to get a baseline measure of moth activity in your orchard. Place pheromone traps beginning in June through August, when adult moths are flying and laying eggs. Be sure to place traps 4 to 6 feet from the ground, as this is the ideal placement to get the best capture of dogwood borer moths. Mating disruption is also an effective strategy against this insect; however, this approach is most effective with multiple years of use.

White latex paint can be used on tree trunks to deter female moths from laying eggs on trees and mosquito netting can be installed as a physical barrier to prevent egg laying on trees. When needed, pyrethroid and neonicotinoid insecticides can be applied as trunk sprays targeting any burr knots and the lower four-feet of trunk, soaking the bark. A single spray in late-June is the best timing against this pest in the Midwest, which coincides with peak egg hatch.

Last but not least, there are several other caterpillars and beetles that bore into orchard trees, so if you see signs and symptoms of this activity, be sure to take photos and send them to the Purdue Plant and Pest Diagnostic Lab so we can confirm the culprit (insect or otherwise!) and provide the best recommendation for protecting your trees.

Hertha Ann Meyer Obituary

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

It is with great sadness that we announce the passing of Hertha Ann Meyer . Hertha died Wednesday, August 20, 2025 at her home with family by her side. Obituary notice below.

Hertha Ann Meyer obituary

Cleaning and Sanitation workshop

(Amanda Deering, adeering@purdue.edu)

5Keeping produce safe and meeting buyers and regulatory expectations starts with strong cleaning and sanitation practices. Farms that implement proper procedures not only protect public health but also improve efficiency and build trust with customers. To help growers and farm workers strengthen these skills, we invite you to join us on **September 8th from 1:00 PM to 5:00 PM at the Purdue Student Farm** for a **free**, hands-on Cleaning and Sanitation Workshop. Attendees will learn from Purdue Extension experts about:

- Cleaning and Sanitizing Basics: wash/pack area practices, sanitizer dilution, and using a Dosatron.
- Regulatory Requirements: understanding cleaning and sanitation rules for produce safety.
- SSOPs and Recordkeeping: writing Sanitation Standard Operating Procedures and maintaining records for third-party audits preparation.
- Water Sample Collection: hands-on activity to properly collect and handle a water sample
- ATP Meter Activity: using an ATP meter to test cleaning and sanitation efficacy in real time.

Don’t miss this chance to gain practical, farm-ready skills that strengthen food safety programs and prepare for audits registration is free!

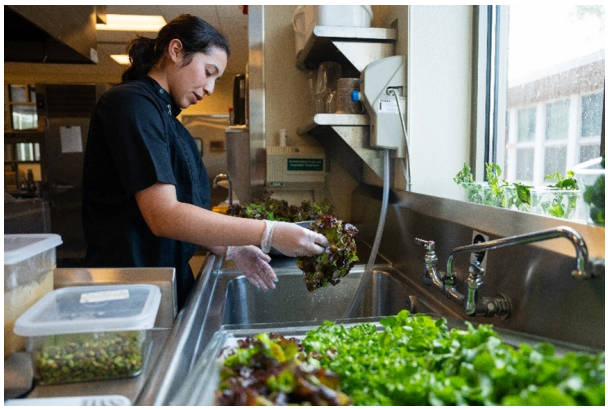
Registration Link: https://purdue.ca1.qualtrics.com/jfe/form/SV_81blwfocQNWOSYS

***Date**: 09/08*

***Time**: 1-5pm*

***Location**: Purdue Student Farm (PSF)*

1491, Cherry Ln, West Lafayette, IN, 47906



Upcoming events

(Miranda Purcell, mrpurcel@purdue.edu)

Cleaning and Sanitation Workshop

September 8th from 1-5:00PM

Purdue Student Farm West Lafayette, IN

https://purdue.ca1.qualtrics.com/jfe/form/SV_81blwfocQNWOSYS

Indiana Horticulture Conference & Indiana Small Farms Conference

March 3-5, 2026

Hendricks County Fairgrounds Danville, IN

https://indianahortconference.org/

https://extension.purdue.edu/anr/_teams/dffs/small_farm_conference/index.html

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