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# **Crop Conditions**

(Bruce Bordelon, bordelon@purdue.edu, (765) 494-8212) & (Lori K Jolly-Brown, ljollybr@purdue.edu)

Grapes harvest has started in the Lafayette area. A bit of both powdery and downy mildew are present on leaves, but overall fruit quality looks great. Recent rains did not cause fruit cracking so fruit rots are minimal. Early apples are over and mid-season varieties are getting close. Fall bearing (primocane fruiting) red raspberries and blackberries are being harvested. Spotted wing Drosophila are abundant. Japanese beetle damage to flowers and high temperatures earlier caused significant issues with fruit set on the primocane fruiting blackberries. Pawpaws are starting to ripen.



Steuben grapes



Marquette grapes



Rosalee apples



**Apples** 



Primocane red raspberries



Primocane blackberries



Primocane blackberry blossom damage

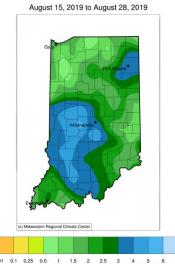


Pawpaw

# Indiana Climate and Weather Report

(Beth Hall, hall556@purdue.edu)

The big story this week was the much-needed rain throughout most of Indiana that fell on Monday (August 19<sup>th</sup>). Since August 15<sup>th</sup>, this brought up to 5" of precipitation throughout west-central, southwest, and northwest Indiana.



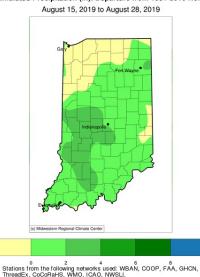
Accumulated Precipitation (in)

This was 2"-4"

0.01 0.1 0.25 0.5 1 1.5 2 2.5 3 4 5 6 8
Stations from the following networks used: WBAN, COOP, FAA, GHCN,
ThreadEx, CoCcPaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
Generated dat 862/2019 24.32.2 PM CDT

#### above normal for the past 2 weeks!

Accumulated Precipitation (in): Departure from 1981-2010 Normals



Midwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment Generated at: 8/28/2019 2:44:47 PM CDT However, as we

transition into September and hope temperatures stay warm to accelerate plant growth and catch up from a late-planting spring, climate outlooks are predicting higher probabilities for belownormal temperatures. Precipitation amounts are predicted to be neither above- or below normal for the first week of September, but should shift to higher probabilities of above-normal precipitation by the second week. Abnormally dry conditions continue throughout the state, but have not intensified. Where there was less rain earlier this week, relative soil moisture within the 10-40 cm depth remains below normal.



## **Hover Flies**

(Laura Ingwell, lingwell@purdue.edu)

Recently we have received reports of swarms of hover flies (aka syrphid flies) around Indiana and wanted to take the opportunity to tell you a bit about this curious insect (Figure 1). Adult hover flies can sometimes be mistaken for bees or wasps, because they look a lot like them! Some people refer to hover flies as "sweat flies" or "sweat bees," but these insects are actually quite different from bees.

Hover flies belong to the Order Diptera, or the true flies. The most abundant group at this time of year belong to the genus *Toxomerus*, which feed on pollen (Figure 2) rather than other softbodied insects, like aphids. Hover flies are typically lighter in color, have a characteristic abdomen-bobbing behavior, and cannot sting at all – in fact, they are harmless. Sweat bees, on the other hand, are typically dark or metallic in color, smaller than common bees and do have stingers. Both hover flies and sweat bees can be a minor nuisance. They are attracted to us by moisture and salts they get by lapping up our sweat.

In corn fields and other flowering crops, you will likely find the larval form of this insect (Figure 3), a small, rather plain-looking maggot, feeding in leaf axils and other areas where pollen collects. Be advised that the larvae are not pests, as they do not damage the crop. Rather, they are taking advantage of an abundance of pollen. This holds true for other flowering crops as well. As corn continues to mature at a more staggered rate than usual this year (a result of the wet spring and delayed/sporadic planting), you may continue to see these insects. Just remember they are not pests and cannot sting you, they just might be a bit bothersome *hovering* around you in large numbers!



Figure 1: Adult syrphid (hover) flies congregating on this gentleman's cap. Photo courtesy of John Obermeyer, Purdue Extension.



Figure 2: Syrphid flies on sweet corn tassel. Photo courtesy of John Obermeyer, Purdue Extension



Figure 3: Syrphid fly larvae (highlighted in yellow) and detached corn anthers. Photo courtesy of John Obermeyer, Purdue Extension.

Larry Bledsoe, Laura Ingwell, Christian Krupke, Elizabeth Long, John Obermeyer, & Cliff Sadof

# Welcome Dr. Stephen Meyers

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

Earlier this month Dr. Stephen Meyers joined the faculty in the Department of Horticulture and Landscape Architecture as an Assistant Professor. His research and extension efforts will focus on weed management in specialty crops. Before returning to Purdue he served as an Associate

Extension/Research Professor and Sweet potato Extension Specialist with Mississippi State University where he conducted practical crop production, pest management, and value-added research to address stakeholder concerns and needs. He also co-managed a 640 acre research station in North Mississippi that focused on sweet potato, cotton, corn, and soybean research. Stephen grew up in Rensselaer, Indiana (Jasper County) and earned a Bachelor of Science degree from Purdue University in 2007 where he majored in Horticultural Production and Marketing and minored in Weed Science. Upon graduation, he pursued a M.S. and Ph.D. in Horticulture at North Carolina State University (2009 and 2012, respectively) conducting weed management research in numerous vegetable, small fruit, and tree fruit crops. Dr. Meyers will conduct research in weed biology, weed-crop interactions, herbicide tolerance, and integrated weed management strategies and provide the state's specialty crop producers with timely, research-based weed management recommendations. He looks forward to meeting the state's specialty crop producers and working collaboratively to address their weed-related concerns.

Dr. Meyers can be reached by email (slmeyers@purdue.edu) or phone (765-496-6540). Also, you can follow Dr. Meyers on Twitter (@stephenlmeyers).



Dr. Stephen Meyers

## **Extension Events**

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

**September 5, 2019** Hydroponics & Greenhouse workshop

Purdue University, Deans auditorium, HLA greenhouse

Contact Lori Jolly-Brown, Ijollybr@purdue.edu
Participants will learn about optimal conditions
for growing hydroponic lettuce, including nutrient
recipes, production systems, artificial lighting
practices and optimal temperatures for lettuce.
Workshop attendees will also have the
opportunity to tour the department's greenhouse
and hydroponic facilities where several hands-on
activities will take place. Krishna Nemali,
professor of controlled environment agriculture,
will lead the workshop. Nemali's research centers
on enhancing sustainable growing practices in
controlled environments, like greenhouse and
indoor vertical farms.

October 17, 2019 Indiana Flower Growers association conference
Purdue University, Daniel Turf Center
Contact Lori Jolly-Brown, Ijollybr@purdue.edu
Horticulturists and greenhouse operators will have an opportunity to network with industry

experts and Purdue Extension specialists.
Educational sessions to include technology and automation, electrical conductivity sensors, marketplace opportunities, greenhouse production, worker production standards, as well as networking with other flower growers across the state.

**January 7, 2020** Illiana Vegetable Growers Symposium

Teibel's Family Restaurant, 1775 US 41, US 30 & US 41, Schererville, IN

https://ag.purdue.edu/hla/Extension/Pages/IVGS.a spx

**February 11-13, 2020** Indiana Horticultural Conference & Expo Indianapolis Marriott East Hotel: Contact Lori Jolly-Brown, ljollybr@purdue.edu

The Indiana Horticultural Conference & Expo, presented by Purdue University, is an educational meeting designed to meet the needs of fruit, vegetable, wine, organics, greenhouse, high tunnel, specialty crop growers and marketers in Indiana and surrounding states. Over 500 registrants and more than 70 vendors attend each year.

**February 11-13, 2020** Indiana Green Expo Indiana Convention Center, Indianapolis, IN Indiana's largest, most comprehensive green industry event of the year!

Offering over 75 educational seminars plus a Spanish track, certification opportunities, in-depth workshops, numerous CEUs and CCHs to be earned, and a two-day trade show!

**July 30, 2020** Small Farm Education Field Day Daniel Turf Center, Purdue Student Farm Contact Lori Jolly-Brown, Jjollybr@purdue.edu

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