FANCY FRUIT

A Newsletter for Commercial and Advanced Amateur fruit growers.

In This Issue

lssue: 22-07 June 24, 2022

- Crop Conditions
- Storms, High Heat, Variable Precipitation, and Dryness
- Pesticide Drift- Watch Out For Grapes

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- Timely Management | Grapevine Leaf Removal
- Strawberry Chat June Record and July Topics
- Purdue Fruit, Veg & Hemp Field Day
- Small Farm Education Field Day

Crop Conditions

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



Peach - fruit at 1" diameter



Apple - fruit at 1" diameter



FACTS FOR

Grape – cluster development



Thornless blackberry - harvest approaching



Red raspberry - harvest underway

Storms, High Heat, Variable Precipitation, and Dryness

(Austin Pearson, pearsona@purdue.edu)

There is no shortage of weather to discuss this week! Heavy damage to buildings, trees, and powerlines was reported in northern Indiana as a result of the Derecho that occurred on June 13. Unfortunately, there was a fatality associated with the storm. Fort Wayne International Airport recorded a 98-mph wind gust, which broke their record wind speed of 91 mph set in 2012. These storms coincided with excessive heat warnings for the entire state. Most stations had heat indices exceeding 100°F for 3-4 days (June 13-17). On June 14, all Indiana weather stations recorded heat indices ranging from 106-110°F and two northern Indiana stations had heat indices in excess of 110°F (Figure 1).

June 2022 rainfall has been highly variable across the state (Figure 2). The heaviest precipitation was recorded in the north and southeastern parts of the state. Central, western, and southwestern Indiana all saw rainfall totals that were less than 2 inches, which was less than 50 percent of the normal precipitation for June 1-22 (Figure 3). Because of this and other environmental factors, abnormally dry conditions have been introduced to the current U.S. Drought Monitor for westcentral and southern Indiana.

Modified Growing Degree Days (MGDDs) since April 1 (Figure 4), have been tracking near normal to slightly below normal in the northern part of the state (Figure 5). From central to southern Indiana, MGDDs are near normal to 60 MGDDs above normal. Isolated locations in central Indiana are running 60-90 MGDDs above normal.

The Climate Prediction Center Outlooks highlight elevated confidence in below normal precipitation through the beginning of July. Because of this, it is highly likely that drying conditions will continue across the state and may see worsening conditions in the U.S. Drought Monitor. New maps are released every Thursday. Stay tuned...



Figure 1. June 14 Maximum Heat Index values from stations across the Midwest.



Figure 2. Accumulated precipitation from June 1-22, 2022.



Figure 3. Precipitation for June 1-22, 2022 represented as the percentage of what normally fell during that period from 1991-2020.



Figure 4. Modified growing degree day ($50 \circ F$ / $86 \circ F$) accumulation from April 1 – June 21, 2022.



Figure 5. Modified growing degree day (50°F / 86°F) accumulation from April 1 – June 21, 2022, represented as the departure from the 1991-2020 climatological average.

Pesticide Drift- Watch Out For Grapes

(Miranda Purcell, mrpurcel@purdue.edu)

Pesticide Drift

Grapes are particularly sensitive to growth regulator herbicides, such as 2,4-D and dicamba, which are widely used in corn and soybean production. These products can injure the vines, significantly reduce yields and contaminate the fruit even at extremely low rates. The most common symptoms of pesticide exposure include distortion of leaves and stunting of leaves and shoots (Figure 1 and Figure 2).



Figure 1. Fan-shaped leave distortion commonly caused by 2,4-D damage to grapevines. Photo from Purdue Extension



Figure 2. Cupping of leaves and distortion of shoots commonly caused by dicamba damage to grapevines. Photo from Purdue Extension

What can you do?

Applicators can reduce the risk of off-target damage by avoiding spraying herbicides past early May. After that, applicators should consider applying only non-volatile products, such as glyphosate. Some options for grape growers to avoid problems include 1) planting grape varieties that are less sensitive to growth regulators 2) selecting sites that are isolated from crop fields and/or 3) planting windbreaks.

Driftwatch is a voluntary communication tool that enables crop producers, beekeepers, and pesticide applicators to work together to protect specialty crops and apiaries through the use of mapping programs. Driftwatch communicates the presence of your vineyards, orchards and/or other herbicide sensitive crops to commercial applicators and adjacent farms. There is no fee to register your site.

DriftWatch

Sign-up as a specialty crop producer here Sign-up as an applicator here

For more information on herbicide damage to grapes, see 'Watch Out for: Grapes' by Dr. Bruce Bordelon: https://www.extension.purdue.edu/ext media/HO/DW-10-W.pdf

Timely Management | Grapevine Leaf Removal

(Miranda Purcell, mrpurcel@purdue.edu)

Now is the time to start thinking about leaf removal in grapevines. Cluster zone leaf removal can lower risk of disease, increase spray penetration and even improve fruit quality. The period immediately after bloom to 3 weeks postbloom is the most effective time for leaf removal. Leaf pulling after this time can increase the risk of sunburn, especially on the west side of the canopy. Many growers only leaf pull on the east side of the canopy (on north-south rows) to avoid this. The removal of the basal 3-5 leaves in the cluster zone can reduce the risk of bunch rots. especially in tight clustered varieties such as Vignoles, Seyval and Chardonel. Increasing sun makes the berries less susceptible to disease and allows for rapid drying after rain or dew. Leaf removal can also improve fruit quality in aromatic varieties, such as Traminette, and can improve anthocyanin development in red varieties.

In high cordon-trained systems, pulling shoots off the tops of the rows can also help improve sunlight exposure to the leaves at the base of the shoots. These basal nodes will be retained at pruning and will provide next year's crop; increasing sun exposure has been shown to improve bud fruitfulness as well as cane hardiness. Shoot positioning can help achieve these goals as well and may need to be done multiple times throughout the season.



Figure 1. Post-bloom leaf removal in the cluster zone on VSP-trained vines

Strawberry Chat — June Record and July Topics

(Wenjing Guan, guan40@purdue.edu)

Topics of July strawberry chat are Weed Control and Insect Pest Management.

Our guests are Drs. Stephen Meyers and Samantha Willden, and Mr. David Doud.

Dr. Meyers is an assistant professor and weed scientist at the Horticulture and Landscape Architecture Department. Dr. Meyers will discuss weed management and herbicide options in matted-row and plasticulture strawberry production. Dr. Willden is a postdoctoral research associate at the Entomology Department, working with Dr. Laura Ingwell. Dr. Willden did her PhD research on strawberry pest management at Cornell University in New York. She will talk about insect pest management. We are also excited to have Mr. David Doud join our discussion. David is the owner of David Doud's Countyline Orchard, Wabash, IN. David will share with us his experience in weed control and renovation.

Register for the July strawberry chat on July 6, 12-1 pm EST.

https://purdue-edu.zoom.us/meeting/register/tJ0u cO6ppz4sHtxsZVX9ZvdVWvxQ4XDbsYdR

After registering, you will receive a confirmation email containing information about joining the meeting.

Previous strawberry chat can be found at https://anchor.fm/strawberrychat

Purdue Fruit, Veg & Hemp Field Day

(Lori K Jolly-Brown, Ijollybr@purdue.edu) Purdue Fruit, Veg & Hemp Field Day July 21, 2022 Purdue Meigs Ag Center 9101 S 100 E, Lafayette, IN 47909

Registration is now open! https://tinyurl.com/ypfubpkp



Small Farm Education Field Day

(Lori K Jolly-Brown, Ijollybr@purdue.edu) Small Farm Education Field Day July 29, 2022 Purdue Student Farm 1491 Cherry Lane, West Lafayette, IN

Registration is now open! https://www.purdue.edu/hla/sites/studentfarm/



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