PURDUE UNIVERSITY

FACTS FOR FANCY FRUIT

Issue: 22-09
July 22, 2022

A Newsletter for Commercial and Advanced Amateur fruit growers.

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Crop Conditions

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

Pixie Crunch: fruit development

Blackberry- early harvest

Peach – fruit nearing harvest

Welcomed rain brings some relief

(Beth Hall, hall556@purdue.edu)

This past weekend brought some much-needed rain to the Hoosier state. Figure 1 shows the total amount that fell from July 13-19, 2022 while Figure 2 puts these amounts into climatological perspective. At least one-half inches fell with some locations reporting well over 4 inches! Was this enough to remove abnormally dry or drought conditions that have been haunting the region? In some counties, yes. In other counties, relief was certainly experienced but not enough to say that drought concerns are behind us. Crops welcomed the moisture, but many are still showing signs of stress (particularly across most of west-central Indiana) and there are plenty of lawns still thirsty for more rain. The latest U.S Drought Monitor released July 21, 2022 (Figure 3) illustrates areas where conditions are either abnormally dry for this time of the year or are experiencing moderate drought conditions.

Heat index values – the apparent temperature *felt* by plants and animals – continued to be high this week due to the high humidity. The higher the atmospheric humidity, the slower the process of evaporation from our bodies that help us cool down. The national Climate Prediction Center (CPC) provides forecasts of heat index values for the 8-14-day period in the future (Figure 4). For the period July 28 through August 3, 2022, these forecasts are predicting high confidence that the average daily maximum heat index value will exceed 95°F (northern Indiana) to 105°F (southern Indiana).

Climate outlooks for that same 8-14-day period are offering some hope regarding precipitation. While temperatures are favored to be above normal during this period, precipitation outlooks are slightly favoring above-normal conditions. This should continue to ward off serious concerns about drought conditions amplifying and spreading across the state to dangerous levels. However, the monthly outlook for August is favoring below-normal precipitation across Indiana with increased confidence this will occur across the northern two-thirds of the state. The seasonal outlook for August-September-October has too much uncertainty regarding precipitation. Figures 5 and 6 illustrate the accumulated modified growing degree day values and departures from normal for a start date of April 15, 2022 through July 20, 2022.

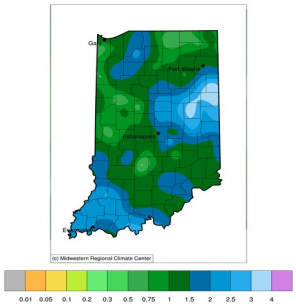


Figure 1. Interpolated precipitation amounts (inches) accumulated from July 13-19, 2022.

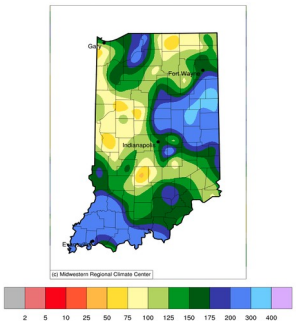


Figure 2. Accumulated precipitation from July 13-19, 2022 represented as a percentage of the climatological normal amount during that same period. Climatological normals based upon 1991-2020 data.

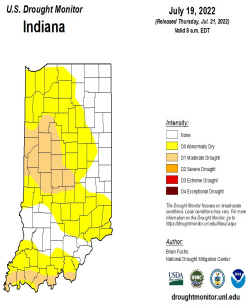


Figure 3. U.S. Drought Monitor for Indiana as of July 21, 2022.

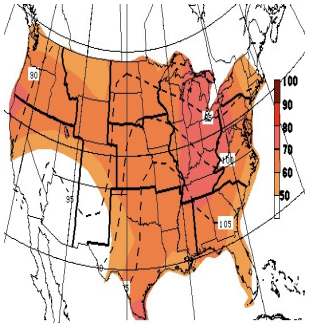


Figure 4. Forecasted outlook for July 28-August 3, 2022 of maximum daily heat index during this period. Dashed lines are the average (1981-2010) threshold for above-normal maximum heat index with the colored shaded areas indicating the probability the forecasted maximum heat index values will exceed climatology. https://www.cpc.ncep.noaa.gov/products/predictions/short_range/heat/hi_814.php

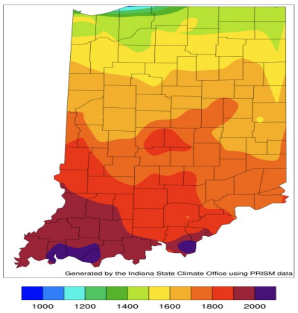


Figure 5. Modified growing degree day (50°F / 86°F) accumulation from April 15-July 20, 2022.

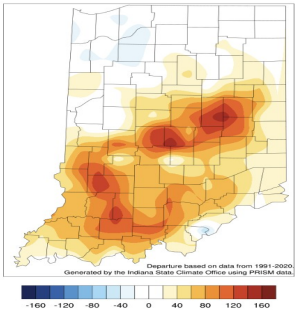


Figure 6. Modified growing degree day (50°F / 86°F) accumulation from April 15-July 20, 2022, represented as the departure from the 1991-2020 climatological average.

Apple hand thinning

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

With apples over an inch in size, we traditionally consider that the window for hand thinning has closed. At this point, it's unlikely we'll see a thinning response either in terms of fruit size or in flower initiation for next year. But there's still a good reason to consider some hand thinning.

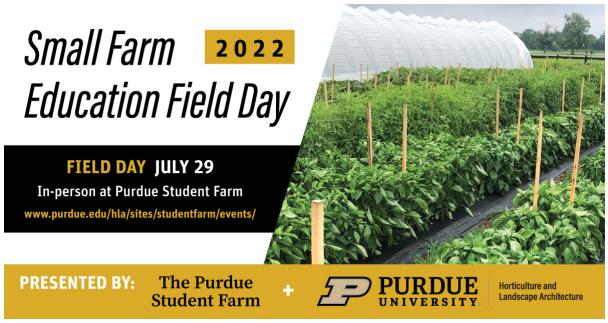
Many in the state have at least some of their orchards carrying too many fruit and have some over-cropped trees. Often in these situations, fruit can be quite bunchy. See the apple picture under 'Crop Conditions' showing 3 Pixie Crunch fruit in a bunch. As the fruit grow, they can push other fruit in the bunch off. Not only are these fruit lost, but they bounce down through the tree canopy damaging other fruit in the process. This problem tends to be most severe in cultivars with short stems, such as Honeycrisp. I know it's labor intensive, but thinning fruit down to no more than 2 fruit per spur will reduce the amount of fruit that is pushed off. Growers should prioritize high value cultivars first.

Small Farm Education Field Day

(Lori K Jolly-Brown, ljollybr@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/



Pinney Purdue Vegetable Field Day

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

Pinney Purdue Vegetable Field Day
Aug. 9, 2022, 5 to 8 p.m. Central Time.
Register at https://puext.in/VegEvening2022 .
More info at https://extension.purdue.edu/events/county/porter/2022/08/pinney-purdue-vegetable-field-day.html

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Editor: Peter M Hirst | Department of Horticulture and Landscape Architecture, 625 Agriculture Mall Dr., West Lafayette, IN 47907 | (765) 494-1323