PURDUE UNIVERSITY

FACTS FOR FANCY FRUIT

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A Newsletter for Commercial and Advanced Amateur fruit growers.

In This Issue

Crop conditions

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It's been a fruitful year here at the Meigs Horticultural Facility in Lafayette, Indiana. We are now harvesting primocane blackberries, most all grapes, early season apples, and on our fourth harvest of watermelons. The harvest so far has been plentiful and the just most delicious fruit across the board! Pears and paw paws are a week or two away from harvest. We have had a tremendous year and are looking forward to ending the season on a good note. Thank you all for following our fruit progress this year!

Watermelon: Maturation/ Ripe

Grapes: second-third harvest

Pear: Maturation

Apple (Rosalee): Maturation

Paw Paw: Maturation

Apple (Pixie Crunch): Maturation/ Ripe

Blackberry: Maturation/ Ripe

A Major Cool-Down On The Way

(Jacob Dolinger, jdolinge@purdue.edu)

Summer just had to throw us a going away party in the form of extreme heat! Temperatures soared into the 90s during the final week of August, with heat index values over 100°F for much of the state. Lafayette, South Bend, and Fort Wayne all set daily records on Tuesday, August 27th for maximum temperatures at 96°F, 96°F, and 97°F, respectively. In South Bend, the heat index soared to 108°F, which was the highest this month. Heat index values were similarly high at the end of August 2023, but prior to that, they have not been that high in August since 1995.

Those who desire cooler weather for outdoor activities and work will be happy to know the National Weather Service's Climate Prediction Center (NWS CPC) is forecasting a likely chance of below normal temperatures for the entire Hoosier state for the first week of September (Figure 1). We could see lows below 50°F—sweater weather!

As for precipitation, it's the same as last week—there's just not much coming our way. The CPC predicts a very likely chance that precipitation will be below normal for most of the state to start September (Figure 2). It's typical that we dry out this time of year, but there are still some areas with long term soil moisture deficits. This means that a pattern like this, even if only for a few weeks, could inhibit the development of flash drought. There are already indicators for rapid onset drought risk across central and southern Indiana come September (Figure 3), so be sure to have a plan as soils dry out these next few weeks. Abnormally dry conditions (D0) are already present across much of western and northern Indiana as of August 27, and moderate drought (D1) now covers a few counties in eastern Indiana (Figure 4).

Figure 1: The National Weather Service's Climate Prediction Center forecasts below normal temperatures for most of the eastern U.S., save Florida, for the first week of September.

Figure 2: The CPC is predicting a very likely chance of below normal precipitation for Indiana for the first week of September.

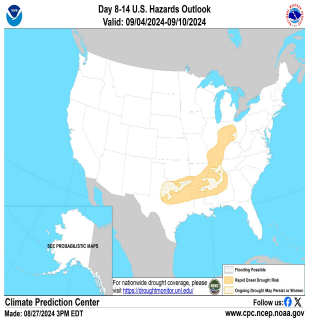


Figure 3: Rapid onset drought, also known as "flash drought", will make a return to central and southern Indiana in the coming weeks as a much drier pattern takes hold.

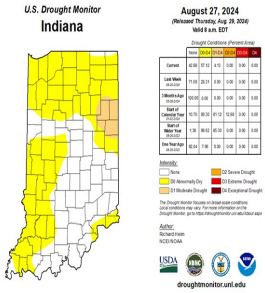


Figure 4: The U.S. Drought Monitor now displays abnormally dry conditions for over half the state, and moderate drought over several counties along the Ohio border.

Strawberry Growers: Navigating the Challenges of Neopestalotiopsis Disease

(Wenjing Guan, guan40@purdue.edu) & *(Dan Egel, egel@purdue.edu)*

Strawberry Growers: Navigating the Challenges of Neopestalotiopsis Disease

If you're expecting plug plants for your strawberry crops, you've likely heard about the emerging threat of *Neopestalotiopsis* disease. For those unfamiliar, I recommend reading Dr. Phil Brannen's article, "Dramatic Neopestalotiopsis Disease in Strawberry Tips and Plug Plant Production Nurseries" from the University of Georgia Extension.

Recently, I've been in discussions with a few fruit growers who ordered plants from affected nurseries to explore our options. Some nurseries hit hard by this disease are unable to fulfill orders, while others are offering farmers options: accept the plants with no performance guarantees or receive a refund within a limited time. The real dilemma for fruit growers is that everything is prepared—except the plants. Refusing the potentially affected plants now could mean a very difficult task of finding healthy replacements at this late stage.

If you do accept the plants, Dr. Brannen suggests an aggressive spray program to combat the disease. While none of us like the idea of additional sprays, this might be the necessary course of action this year.

Moreover, I strongly recommend adopting a strategic approach to planting. If you've already planted bare-root plants, avoid placing plug plants adjacent to them. To our knowledge, bare-root plants are not affected by this issue. If we face a season conducive to disease, at least this strategy might help prevent the disease spread to healthy crops. Similarly, if you are planting multiple varieties, consider spacing them apart, as research shows that cultivars vary in their susceptibility to *Neopestalotiopsis*.

A few years ago, we tested 22 varieties for susceptibility to *Neopestalotiopsis*. Our findings revealed that *Florida Brilliance, Florida Sensation, Camino Real, and Florida Radiance* were among the most susceptible. Day-neutral cultivars *Albion, San Andreas,* and, to a lesser extent, *Evie 2* also showed significant susceptibility. However, several short-day cultivars, including *AC Valley Sunset, Darselect, Earliglow, Flavorfest, Galletta, Honeoye, Jewel,* and *Sonata,* remained asymptomatic during our trials. You can find more details on this trial in the publication "Strawberry Cultivar Susceptibility to Neopestalotiopsis Leaf Spot in Indiana."

Dr. Dan Egel, now retired from Purdue University, has also conducted fungicide trials for managing this disease. His research found that Captan 80 WDG®, Thiram SC®, Tilt®, and Switch 62.5 WG® provided significantly better control than other treatments. Interestingly, the disease levels in treatments with Abound® andPristine®were not different from the untreated control. So, do not use these fungicides. Organic options like Badge X2®, Serenade Opti®, and SilMatrix® performed

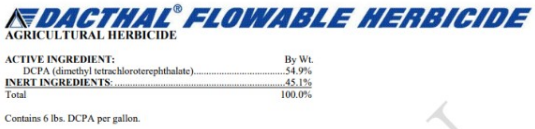
better than Pristine® and Abound ® but were not as effective as Captan 80 WDG®, Thiram SC®, Tilt®, and Switch 62.5 WG®. For more information, refer to his article, "Evaluation of Fungicides for the Management of Neopestalotiopsis Leaf Spot 2021".

Note that this article discusses the foliar portion of this disease. For example, the fungicides and cultivars discussed here are mentioned in relation to the foliar portion of the disease. There is also a dieback disease that may be caused by *Neopestalotiopsis*. Plants that show such symptoms should be sent to the PPDL on Purdue campus. More information about both phases of the disease can be found in the link below.

Dr. Dan Egel has provided a presentation titled 'A Midwestern Perspective on a New Strawberry Disease Caused by Neopestalotiopsis spp.' that summarizes these findings. We hope this information proves helpful during this challenging time.

EPA Issues Order to Immediately Stop the Use of Dacthal Herbicide

(Stephen Meyers, slmeyers@purdue.edu)


DACTHAL® FLOWABLE HERBICIDE
AGRICULTURAL HERBICIDE

ACTIVE INGREDIENT:	By Wt.
DCPA (dimethyl tetrachloroterephthalate)	54.9%
INERT INGREDIENTS:	45.1%
Total	100.0%

Contains 6 lbs. DCPA per gallon.

In a press release on August 6, 2024, EPA announced the emergency suspension of all registrations of DCPA (marketed and sold as Dacthal® herbicide). The full press release can be viewed here: EPA Issues Emergency Order to Stop Use of Pesticide Dacthal to Address Serious Health Risk | US EPA

Why did EPA do this?

EPA determined that exposure of pregnant mothers to DCPA can result in changes to fetal thyroid hormone levels, which in turn can result in low birth weight, impaired brain development, decreased IQ, and impaired motor skills.

EPA determined that even when personal protective equipment is used and the labeled re-entry interval (12 hours) is followed, the risk of exposure to field workers could be greater than 20 times what EPA estimates is safe for unborn babies.

Why did this happen now?

Although this decision seems sudden, EPA expressed concerns about DCPA in 2013 and requested additional data from the herbicide's registrant, AMVAC Chemical Corporation. In 2022, EPA issued a notice of intent to suspend production of DCPA, which I wrote about in a Facts for Fancy Fruit article here: Future of Dacthal® Herbicide Uncertain | Purdue University Facts for Fancy Fruit. EPA suspended registration of Dacthal® in August of 2023 then lifted the suspension in November that same year. EPA intends to issue a notice of intent to cancel DCPA products in the next 90 days.

What does this mean?

All use of Dacthal must stop effective immediately.

We will update this information on the Midwest Vegetable Production Guide database (mwveguide.org) and in future revisions of the Midwest Fruit Pes

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