PURDUE UNIVERSITY
PURDUE EXTENSION
FACTS FOR Fancy Fruit
Issue: 19-02
April 12, 2019

In This Issue

Crop Conditions

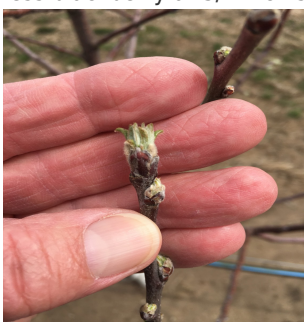
(Bruce Bordelon, bordelon@purdue.edu, (765) 494-8212)

This past week has been warm enough that we're seeing activity in the Lafayette area. Southern areas are further along. See the note from Englebrecht's Orchard in the Evansville area. We appreciate their help with crop condition reports and welcome others to submit their observations as well.

In the Lafayette area brambles are pushing rapidly. Some are past 3/4 inch green and leaves are starting to show. Early grapes are just starting bud swell. Apples are mostly at half inch green. Paw paw flowers are swollen but have not started to open yet. Strawberry leaves continue to grow but flower buds are not yet visible in the crowns. There is still a risk of frost across the central and northern part of the state. Best wishes for a frost-free spring.

Niwot Black Raspberry

Thornless blackberry at 3/4 inch shoots



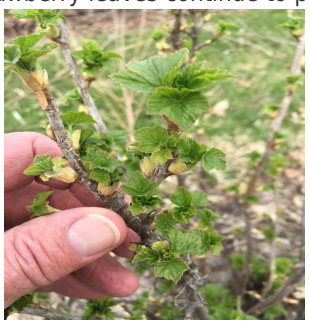
Apple at half inch green

Peach shoots at 1/2 to 3/4 inch. Note dead flower buds

Marquette grape at early bud swell

Paw paw flowers fully swollen

Strawberry leaves continue to push



Gooseberry near bloom

Engelbrecht's Countryside Orchard

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

Greetings from Engelbrecht's Countryside Orchard,
Fruit trees are really progressing in Southern Indiana. It is the second week of April, and we have many varieties of nectarines and peaches in full bloom. Most apples are at tight cluster, and just this week we are seeing the first blooms on our sweet cherries.

Kristi Schulz
Engelbrecht's Countryside Orchard

Apple at tight cluster

Cherry in early bloom

Peach at full bloom

Ten step program to manage bacterial canker of sweet cherry

(Janna L Beckerman, jbeckerm@purdue.edu, (765) 494-4628)

Sweet cherry is crop that continues to be of great interest to Indiana growers. It also continues to be a challenge due to bacterial canker, caused by *Pseudomonas syringae*. This bacterium is a significant pathogen of young sweet cherry trees killing 10 to 20 percent of the trees in new orchards within 5 years of planting. I've modified Dr. Robert A. Spotts, OSU Mid-Columbia Agricultural Research and Extension Center, Hood River, OR, suggestions for the integration of several techniques that are more appropriate for Indiana growing:

1.Do not interplant new trees with old trees, which are major sources of *P. syringae*. Think about it! Any old, infected trees serve as inoculum to infect new trees!

2. Keep irrigation water off the part of the trees above ground as much as possible for the first 2 or 3 years after planting. If irrigating, consider withholding water in late summer so trees will "harden off" and not be as susceptible to low temperature injury in early winter. If you were wondering about a lot of the dieback your stone fruit had last season, now you know. Unfortunately, there is little we can do about the weather.
3. Avoid all types of injury—mechanical, insect, frost. Paint all trunks white with latex paint to prevent winter injury. Adding copper to the paint is probably of little benefit.
4. Some studies show less bacterial canker when pruning is delayed until spring, even as late as after flowering in May. Less disease also occurs when summer pruning is used. Prune only during dry weather if possible.
5. Remove branches and trees killed by *P. syringae* from the orchard and destroy them. Take care while pruning to

minimize the potential spread of bacteria.

6. Mazzard F12-1 is one of the most resistant rootstocks. Resistance of new rootstocks is unknown at this time, but trees on Mazzard may have an advantage over trees on size-controlling rootstocks. Sweet cherry scion cultivars are all susceptible to varying degrees.
7. Locate the orchard in an area less likely to be affected by frost and slow drying conditions.
8. Provide optimal soil conditions for growth of cherries, including attention to pH and nutrition. Application of excess nitrogen, especially late in the growing season, will promote late-season growth that is susceptible to low temperature injury in early winter, followed by bacterial infection.
9. Control weeds, especially grasses. They often support large populations of *P. syringae*. Clover and vetch ground covers support lower populations. Consider clean cultivation of row middles for the first 3 years.
10. Application of fixed copper products or Bordeaux 12-12-100 is no longer recommended. In recent research trials, these treatments resulted in higher damage than that in untreated controls.

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Figure 1. Bacterial blossom blast, a symptom of bacterial canker of sweet cherry caused by Pseudomonas syringae pv. syringae. Photo by George Sundin.

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Figure 2. Bacterial blossom blast, a symptom of bacterial canker of sweet cherry caused by Pseudomonas syringae pv. syringae. Note: essentially all spurs on this tree are affected by blast. Photo by George Sundin.

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Figure 3. Bacterial canker of cherry. Photo by George Sundin.

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Figure 4. Leaf Spot Symptoms. Photo by George Sundin.

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Figure 5. Gummosis. Photo by Janna Beckerman

USDA News Release

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

USDA Announces Buy-Up Coverage Availability and New Service Fees for
Noninsured Crop Coverage Policies

Changes apply Beginning April 8, 2019

WASHINGTON, April 8, 2019 – USDA's Farm Service Agency (FSA) today announced that higher levels of coverage will be offered through the Noninsured Crop Disaster Assistance Program (NAP), a popular safety net program, beginning April 8, 2019. The 2018 Farm Bill also increased service fees and made other changes to the program, including service fee waivers for qualified military veterans interested in obtaining NAP coverage.

"When other insurance coverage is not an option, NAP is a valuable risk mitigation tool for farmers and ranchers," said FSA Administrator Richard Fordyce. "In agriculture, losses from natural disasters are a matter of when, not if, and having a NAP policy provides a little peace of mind."

NAP provides financial assistance to producers of commercial crops for which insurance coverage is not available in order to protect against natural disasters that result in lower yields or crop losses, or prevent crop planting.

NAP Buy-Up Coverage Option

The 2018 Farm Bill reinstates higher levels of coverage, from 50 to 65 percent of expected production in 5 percent increments, at 100 percent of the average market price. Producers of organics and crops marketed directly to consumers also may exercise the "buy-up" option to obtain NAP coverage of 100 percent of the average market price at the coverage levels of between 50 and 65 percent of expected production. NAP basic coverage is available at 55 percent of the average market price for crop losses that exceed 50 percent of expected production.

Producers have a *one-time opportunity until May 24, 2019*, to obtain buy-up coverage for 2019 or 2020 eligible crops for which the NAP application closing date has passed.

Buy-up coverage is not available for crops intended for grazing.

NAP Service Fees

For all coverage levels, the new NAP service fee is the lesser of $325 per crop or $825 per producer per county, not to exceed a total of $1,950 for a producer with farming interests in multiple counties. These amounts reflect a $75 service fee increase for crop, county or multi-county coverage. The fee increases apply to obtaining NAP coverage on crops on or after April 8, 2019.

NAP Enhancements for Qualified Military Veterans

The 2018 Farm Bill NAP amendments specify that qualified veteran farmers or ranchers are now eligible for a service fee waiver and premium reduction, if the NAP applicant meets certain eligibility criteria.

Beginning, limited resource and targeted underserved farmers or ranchers remain eligible for a waiver of NAP service fees and premium reduction when they file form CCC-860, "*Socially Disadvantaged, Limited Resource and Beginning Farmer or Rancher Certification.*"

For NAP application, eligibility and related program information, visit www.fsa.usda.gov/nap or contact your local USDA Service Center. To locate your local FSA office, visit www.farmers.gov.

Planting Bare-root Strawberry Plants

(Wenjing Guan, guan40@purdue.edu)

In the matted-row system in strawberry production, spring is the time to plant new strawberry patches. Bare-root plants are used in the system. Although you may hear strawberry plugs (actively growing strawberry transplants) are also used as plant materials, plugs are typical not available in the spring. Similar to other bare-root plants, adequate soil moisture is critical for successful plant establishment. Maximum plant growth happens when temperatures are between 59°F to 79°F. Because of the importance of soil moisture and ideal temperature ranges, plant establishment is more difficult if delaying bare-root strawberry planting into the summer.

There is a growing interest of planting day-neutral cultivars for extended season harvest. Day-neutral cultivars are different from June-bearing cultivars, which are typically used in the matted-row system. June-bearing cultivars require short days to initiate flowers, and thus harvest happens in the second year. Day-neutral cultivars develop flowers regardless of day length as long as night temperatures do not exceed 65°F. Under ideal temperatures, day-neutral strawberry plants start to flower right after establishment, and harvest is possible two months after planting. Harvest can be expected in late spring and fall, but not in summer when temperatures are too high (above 80°F) for fruit development. If the goal is to extend harvest with day-neutral cultivars, strawberries should be planted as soon as soil is workable in the spring. There is no need to wait after the last frost passed as strawberry plants can tolerant light frosts.

Bare-root strawberry plants come in bundles of crowns with roots. They should be kept in a shaded area or refrigerator until planting. Ensure the roots are moist. When planting bare-root strawberry plants, it is important to ensure crowns are contacting the soil but not being buried into the soil. Nurseries normally send planting instructions with the plants. It is very important to follow the instructions. Keep in mind that strawberry plants are sensitive to salinity. It is not recommended to put fertilizers in the transplant water. Thoroughly watering soil before and after planting is important. If temperatures are above 80°F at planting, overhead irrigation would be required for successful plant establishment. Under ideal temperature ranges, new leaf growth should be observed about two weeks after planting (Figure 1).

Figure 1. Established bare-root strawberry plants after being planted on March 22

Survey of Specialty Crop Production and Marketing Challenges

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

A research team at Purdue University invites you to

participate in a survey of specialty crops growers to better understand your production and marketing challenges. **This survey will help us identify future production and marketing research to help support growers like you**. The survey takes approx. 10-15 minutes.

Take the survey: **http://bit.ly/purduesurvey**

Your responses are important because you will be representing your neighbors as well as yourself. **Information from this study can help inform policymakers, state legislators, and industry stakeholders.**

If you have questions or concerns, please contact me to: Dr. Ariana Torres; Assistant Professor and Marketing Specialist; telephone: (765) 494-8781; email: torres2@purdue.edu.

Thank you very much for considering this invitation! Your help is greatly appreciated.

New Leadership Appointed for the Indiana Horticultural Congress

(Bruce Bordelon, bordelon@purdue.edu, (765) 494-8212)

On April 1, 2019, Dr. Hazel Wetzstein, Head of the Department of Horticulture and Landscape Architecture, announced a change in leadership for the Indiana Horticulture Congress. "I am pleased to announce that Petrus Langenhoven and Kyle Daniel have agreed to serve as Co-Chairs for the Indiana Horticulture Congress, effective immediately. They bring a wealth of information and experience and I am looking forward to the leadership they will bring to IHC".

Peter Hirst, will be stepping down as chair. He is going to maintain a program in Pomology in the HLA Department and will assume an active international role as Assistant Director in International Programs in Agriculture (IPIA). "We all wish to thank Peter for his dedication and many years of service as IHC Chair. It is important to note that the past successes of Hort Congress would not have been possible without the dedicated efforts of Lori Jolly-Brown and Tristand Tucker, which are much appreciated. Lori will continue in her excellent role as the primary staff organizer and liaison".

Petrus and Kyle are looking forward to serving the specialty crop growers of Indiana. You can reach them at plangenh@purdue.edu or (765) 496-7955, and daniel38@purdue.edu or (765) 494-7621. Please contact us if you have any suggestions on how we could expand and improve your Indiana Hort Congress experience.

Dual Magnum 24c Label Amended to Include More Crops

(Bruce Bordelon, bordelon@purdue.edu, (765) 494-8212)

Dual Magnum® has had a special local needs (24C) label in Indiana that was amended to include additional small fruit and vegetable crops. The new 24C label is available on the National Pesticide Information Retrieval System web site: http://npirspublic.ceris.purdue.edu/state/state_menu.aspx?state=IN. To find it, type "SLN IN" and "130003" in the first two boxes for "EPA Registration Number" and click the search button. The product report will show "DUAL MAGNUM – TRANSPLANTED BELL PEPPERS." Click on the ALLSTAR symbol. On the page that opens, click on the Company Label ID number "IN0816048DA0319." This will open a pdf of the label.

This 24(c) label allows use of Dual Magnum for brambles, blueberries, strawberries, currants, gooseberries, and elderberries.

If you decide to use the product, carefully read and follow the label instructions.

Events

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

May 6, 2019 Purdue Wine Grape Team Spring Workshop
Blackhawk Winery
Sheridan, IN
Contact: Katie Barnett, barnett6@purdue.edu

May 22, 2019 I INDY International Wine Competition
Purdue University, West Lafayette, IN
http://www.indyinternational.org/

June 1, 2019 Vintage Indiana
Military Park, Indianapolis, IN
https://www.vintageindiana.com/

June 21, 2019 Purdue Master Gardener State Tour
New Albany, IN
https://www.sunnysidemg.org/

July 9, 2019 Turf & Landscape Field Day
Daniel Turf Center, West Lafayette, IN
https://turf.purdue.edu/field-day.html

July 18, 2019 Meigs Field Day
Purdue Meigs Farm
Contact Lori Jolly-Brown, ljollybr@purdue.edu

July 22-23, 2019 Indiana Winery and Vineyard Association Summer Meeting. Country Heritage Winery, LaOtto, IN
https://www.indianawinevine.org/

August 1, 2019 Small Farm Ed Field Day
Daniel Turf Center, Purdue Student Farm
Contact Lori Jolly-Brown, ljollybr@purdue.edu

September 5, 2019 Hydroponics & Greenhouse workshop
Purdue University, Deans auditorium
Contact Lori Jolly-Brown, ljollybr@purdue.edu

September 10-12, 2020 Purdue Master Gardener State Conference
Hosted by Hamilton and Howard Counties
Hamilton County Fairgrounds, Noblesville, IN
https://hcmga.org/2020-state-conference/

October 17, 2019 Indiana Flower Growers association conference

Purdue University, Daniel Turf Center
Contact Lori Jolly-Brown, ljollybr@purdue.edu

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