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Crop Conditions

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

Fruit crops are growing quickly. Spring must finally be here. In Lafayette, apples are mostly at petal fall with a few still at full bloom. Grapes have 1 to 4 inch shoots. Pawpaws are blooming. Bramble blossoms are visible in black raspberries but not in red raspberries and blackberries at this time. Strawberries are in bloom. Among the Ribes group, black currants are at petal fall, white and red currants and gooseberries are still blooming. There's obvious winter injury in blackberries and several grape varieties. Aronia is in bloom and asparagus harvest continues. A few lucky souls are finding morels.



Apples at full bloom



Apples at petal fall



Grapes at 1-4 inch



Paw paw in bloom



Strawberry in bloom



Black raspberry



Blackberry



Winter injury in blackberry



Black currant



White currant



Gooseberry



Aronia in bloom



Morels



Asparagus!

Sweet Cherry

Engelbrecht's Countryside Orchard

(Bruce Bordelon, bordelon@purdue.edu, (765) 494-8212)
May 9, 2019

A few days of pretty warm temperatures (around 80 degrees) have pushed growth of fruitlets. Peaches and nectarines are at least thumb-size and the apple king fruit range from 11-14 mm. Sweet cherries look to be on target for harvest in about two weeks.



Apple



Nectarine



Peach



Engelbrecht's Countryside Orchard

Early Season Grape Sprays

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

Grapes are in the early stages of growth across the state, from bud break to pre-bloom. This is the most important time to maintain "preventative" control of the major grape diseases such as Phomopsis, black rot, powdery and downy mildew. Our general recommendation is to maintain good coverage with mancozeb through the early stages of growth. When vines reach the pre-bloom stage, addition of one of the demethylation inhibiting (DMI) fungicides in the FRAC 3 group greatly improves black rot control and provides powdery mildew control. Rally, Tebustar, Procure, and Mettle are common FRAC 3 fungicides. This group is systemic, thus very rainfast. There are a number of other options available, but this simple approach has been very effective in our trials.

Bramble issues

(Bruce Bordelon, bordelon@purdue.edu, (765) 494-8212)
Blackberries and raspberries have become increasingly popular crops for growers in the state. There are a number of issues with bramble crops. Blackberries are only marginally cold hardy for central and northern Indiana, often suffering damage at temperatures of -10°F or below. Growers using a trellis and winter protection are having success avoiding winter injury, but damage is common where plants are not protected. Blackberries usually show "delayed winter injury" rather than complete death of above ground portions. We're seeing lots of that this year in the Lafayette area following temperatures in the mid to high teens

below zero. Along with winter injury is cane blight, especially on thornless blackberries. This disease seldom expresses itself unless winter injury occurs, even though the canes may be infected. Red necked cane borer is a common insect pest that also predisposes canes to winter injury. Often canes die above the location on the cane where the borers are present following cold winters.

Orange rust is another potential disease problem of concern. It infects black raspberry and blackberry, but not red raspberry. Orange rust is a systemic disease and once a plant is infected, it cannot be cured. Rouging infected plants from the plantings and nearby woods is the best way to minimize spread.

Raspberries seldom suffer significant winter injury. Most common varieties of red and black raspberries are hardy to zone 5 and can withstand temperatures near -20°F. And fortunately they are not highly susceptible to cane blight or red necked cane borer. However, black raspberries are susceptible to orange rust and anthracnose.

Finally, the new insect pest spotted wing
Drosophila has become a major concern for
bramble growers (and most other berry growers).
This pest is very fond of red raspberries and will
select them above most other fruits. They are
also happy to infest blackberries. Controlling
SWD is very difficult, even with frequent
insecticide sprays because the life cycle is as
short at 4 days from egg to adult, so populations
can become very large very quickly.

If you are considering growing brambles, give some serious thoughts to what crops you grow and how you plan to manage the issues discussed here.



Winter injury in thornless blackberry



Discolored and stunted shoots on winter injured blackberry



Orange rust on thornless blackberry



Red necked cane borer damage on thornless blackberry



Orange rust on black raspberry

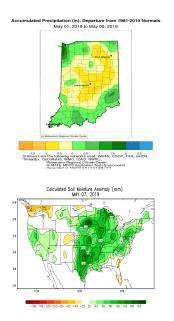
Indiana Climate and Weather Report

(Beth Hall, hall556@purdue.edu)

5/9/2019

The biggest topic seems to be how wet it is and how much more rain Indiana can expect. So far, May has experienced near-normal precipitation throughout the central part of the state with 0.5"-2" in southern and northern regions (Figure 1). Combining this with April's precipitation, however, means the soil moisture is still 60mm to over 80mm above average (Figure 2), causing saturated soils and the propensity for flooding anytime precipitation occurs. Speaking of which, 0.25"-1.5" of additional precipitation is expected over the next 7 days with the lower amounts favoring the northwestern part of the state. Could there be drying beyond that? The climate outlook for May 16-22 is indicating slight probabilities for below-normal precipitation in the northern counties, but the rest of the state is statistically uncertain to predict above- or belownormal precipitation with confidence. However, keep in mind that normal precipitation (based upon 1981-2010 data) during that time period is still 1"-1.5".

Modified growing degree-days (MGDDs) since April 1 have accumulated to 150-400 (from north to south) across the state, which is within 40 units of the climatological average. Northern Indiana is most behind in MGDDs with a departure of -40 to -60 units. The climate outlook for May has significant probabilities of above normal temperatures so hopefully on days when it is not raining, skies will clear enough to allow more rapid MGDD accumulation.



Calculated Soil Moisture

Beth Hall, PhD Director, Indiana State Climate Office

News Release- USDA Accepting Applications to Help Cover Producers' Costs for Organic Certification

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

News Release-

WASHINGTON, May 6, 2019 – USDA's Farm Service Agency (FSA) announced that organic producers and handlers can apply for federal funds to assist with the cost of receiving and maintaining organic certification through the Organic Certification Cost Share Program (OCCSP). Applications for fiscal 2019 funding are due Oct. 31, 2019.

"Producers can visit their local FSA county offices to apply for up to 75 percent of the cost of organic certification," said FSA Administrator Richard Fordyce. "This also gives organic producers an opportunity to learn about other valuable USDA resources, like farm loans and

conservation assistance, that can help them succeed. Organic producers can take advantage of a variety of USDA programs from help with field buffers to routine operating expenses to storage and handling equipment."

OCCSP received continued support through the 2018 Farm Bill. It provides cost-share assistance to producers and handlers of agricultural products for the costs of obtaining or maintaining organic certification under the USDA's National Organic Program. Eligible producers include any certified producers or handlers who have paid organic certification fees to a USDA-accredited certifying agent. Eligible expenses for cost-share reimbursement include application fees, inspection costs, fees related to equivalency agreement and arrangement requirements, travel expenses for inspectors, user fees, sales assessments and postage.

Certified producers and handlers are eligible to receive reimbursement for up to 75 percent of certification costs each year, up to a maximum of \$750 per certification scope, including crops, livestock, wild crops, handling and state organic program fees.

Opportunities for State Agencies

Today's announcement also includes the opportunity for state agencies to apply for grant agreements to administer the OCCSP program in fiscal 2019. State agencies that establish agreements for fiscal year 2019 may be able to extend their agreements and receive additional funds to administer the program in future years. FSA will accept applications from state agencies

FSA will accept applications from state agencies for fiscal year 2019 funding for cost-share assistance through May 29, 2019.

More Information

To learn more about organic certification cost share, please visit the OCCSP webpage view the notice of funds availability on the Federal Register, or contact your FSA county office. To learn more about USDA support for organic agriculture, visit usda.gov/organic.



Events

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

May 22, 2019 | INDY International Wine Competition

Purdue University, West Lafayette, IN Contact Katie Barnett, barnett6@purdue.edu http://www.indyinternational.org/

Nearly 2,000 entries from around the globe will be evaluated by our distinguished judges at the 2019 INDY International Wine Competition. Wine writers and winemakers, winegrowers and enologists, chefs and sommeliers, wine distributors, retailers and consumers meet every year in the heart of America, a truly central place for your wines to be seen and recognized.

June 1, 2019 Vintage Indiana Military Park, Indianapolis, IN Contact Katie Barnett, barnett6@purdue.edu http://www.indyinternational.org/

20th Celebration of Indiana Wines. 11:00am VIP entrance, 12(noon)-6pm regular admission entrance. Vintage Indiana Wine Fest is the BIGGEST annual celebration of delicious wines produced only in Indiana! We're dedicated to celebrating not just the wine, but the spirit of Indiana winemakers; the only winemakers in the world capable of blending Hoosier hospitality into every bottle. This year's festival features nearly 30 Indiana wineries, plus a ton of live entertainment, food and shopping experiences! Get to know Hoosier winemakers from all over the state as they gather in Indianapolis

June 27, 2019 Southwest Purdue Ag Center Field Day

Southwest Purdue Ag Center
Contact Barb Joyner, joynerb@purdue.edu
Horticultural related topics include: Organic
Tomato Production, High Tunnel Grafted
Cucumber & Specialty Melon Production,
Applying IPM Principles across Cropping Systems
to Increase Insect Pollination and Profitability,
Annual Strawberry Production. A meal will be
included, and PARP classes also will be available
after lunch. To register, email
joynerb@purdue.edu, call 812-886-0198, or go

https://purdue.ca1.qualtrics.com/jfe/form/SV_8pn F8z1CwyglrGl by Monday, June 17.

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

online at

The Purdue Turf and Landscape Field Day is an annual one-day event with the objective of providing professional turf and landscape managers exposure and educational opportunities with the latest research and technical resources. The Field Day features research tours, afternoon workshops on current topics, and a tradeshow with over 40 exhibitors displaying equipment and turf and landscape products.

July 18, 2019 Meigs High Tunnel Field Day Purdue Meigs Farm

https://purdue.ca1.qualtrics.com/jfe/form/SV_0HX QwDluRiOnwAB

Contact Lori Jolly-Brown,

mailto:ljollybr@purdue.edu

The field day at Meigs Horticulture Farm, presented by the Horticulture Department and the Department of Entomology, will focus on high tunnel production of cucurbit crops. It will feature tours of conventional and hydroponic high tunnel cucumber and melon production. The use of

insect-exclusion screens to control cucumber beetles and bacterial wilt will be on display in the conventional high tunnel systems. Vegetable grafting and future research in tomato systems will be presented. Attendees will also have an opportunity to discuss current challenges and future directions of research areas for high tunnel production systems.

August 1, 2019 Small Farm Ed Field Day Daniel Turf Center, Purdue Student Farm https://purdue.ca1.qualtrics.com/jfe/form/SV_3qQ fl05iryF3COp

Lori Jolly-Brown, Ijollybr@purdue.edu
The Small Farm Education Field Day presented
by Horticulture & Landscape Architecture will
have classroom educational sessions at the
Daniel Turf Center followed with lunch catered by
Juniper Spoon at the Purdue Student Farm. Tours,
workshops and vendors!

Rototiller vs. power harrow demonstration High tunnel tomato and pepper product Solar dryers for post-harvest processing of fruits, vegetables

Wash pack demonstration

Food safety plans and certification process for gardeners

Dynamic enterprise budgets Scheduling crops in high tunnels Cover crop choices Soil restoration in urban farms

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.

February 11-13, 2020 Indiana Horticultural

Congress
Indianapolis Marriott East Hotel:
Contact Lori Jolly-Brown, ljollybr@purdue.edu
https://www.inhortcongress.org/

The Indiana Horticultural Congress, 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
Contact Brooke Ponder, bponder@purdue.edu
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!

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