

FACTS FOR *Fancy Fruit*



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Crop Conditions:

Grape harvest is finished across the state. Despite the heavy rains this spring, the dry weather of August and September lead to a great harvest. Fruit quality was excellent, rot problems were minimal, and even varieties retrained last year had a reasonable crop. Grape growers are generally very pleased.

Apple harvest is winding down after a reasonable season in most places in the state. Some growers are still harvesting late varieties such as GoldRush and Pink Lady. Weather has been fine encouraging good attendance at both farm and farmer's markets.

Primocane red raspberry harvest has finished for the most part, though some nice fruit is still being harvested. We are still picking fruit on primocane fruiting blackberries at Meigs and expect it will continue until frost. We are excited about the possibility of these cultivars providing new opportunities, especially for northern growers.

Post harvest fungicides for grapes:

Downy mildew is still prevalent in many vineyards this year, despite the much drier conditions recently. If left uncontrolled, it can cause significant defoliation on susceptible varieties well ahead of the first frost. Some infected varieties drop leaves quickly after infection while others are not prone to defoliation even though heavily infected (see Fig. 1, 2, 3). This can lead to low winter hardiness and poor fruitfulness next year. If downy is a problem in your vineyards, I strongly recommend post harvest applications of mancozeb to keep the disease in check until frost. Mancozeb has low risk of resistance development so it is a good choice if you have a significant build up of downy mildew in the vineyard. I recommend against using phosphorous acid products, strobilurins or any of the newer fungicides to avoid potential resistance issues.

(Bordelon)



Fig. 1 Premature defoliation on Jupiter grape by downy mildew



Fig. 2 No defoliation on Traminette grape, despite heavy downy mildew infection



Fig. 3 Heavy sporulation of downy mildew on the lower surface of Traminette leaves.

Broad mites in blackberries:

One of the benefits of attending regional meetings and conferences is to learn from your colleagues. At the annual Midwest Fruit Workers Conference in Indy recently, Dr. Donn Johnson, University of Arkansas entomologist discussed a new pest of blackberries, broad mites. He and I looked through my plots at the Meigs farm in Lafayette and found evidence

of feeding damage. A close inspection of samples under the microscope in the lab confirmed the presence of broad mites in Indiana. This pest causes leaves at the terminals of shoots to be narrow and strappy with either upward or downward rolling (Fig. 4). These symptoms closely resemble herbicide injury, especially glyphosate. If you suspect you have broad mite damage in your blackberries, please contact Bruce Bordelon or Rick Foster. (Bordelon)



Fig. 4 Broad mite damage

Fall Herbicide Applications for Grapes, Berries, Tree Fruit, Hops, etc:

Fall is an excellent time to get a jump on weed management for next season. A number of pre emergent herbicides can be applied during fall to provide residual control through next spring. Labels usually read "apply in late fall

or early spring. . . " Often, labels will suggest splitting an application, with half applied in the fall and half in the spring. The advantage of fall applications is

- 1) control of winter annuals, assuming that the application is made before seed germination,
- 2) less risk of crop damage when applied to plants that are entering dormancy (see warning below)
- 3) dry soil conditions this time of year makes it easy to get into plantings
- 4) residual control into May or June makes weed management easier next year.

Post emergent herbicides can be tank mixed with pre emergent in the fall for improved control of perennial weeds, and control of winter annuals that have already germinated. One warning: Do not apply glyphosate in the fall. Fruit crops are highly sensitive to glyphosate and fall applications can cause significant damage. Choose other post emergent herbicides such as glufosinate, paraquat, Aim, Venue, etc. Check labels and the Midwest Fruit Spray Guides.

(Bordelon)

Facts for Fancy Fruit is a newsletter for commercial and advanced amateur fruit growers. It provides timely information on pest control, production practices, and other topics likely to be of interest to fruit growers. All growers and interested persons are welcome to subscribe.

Subscriptions are \$15 per year. Subscribers will receive 12-15 issues biweekly during the growing season and monthly otherwise.

To subscribe, send your name, mailing address, and check for \$15 (payable to Purdue University) to:

Facts for Fancy Fruit
Purdue University
Department of Horticulture & Landscape Architecture
625 Agriculture Mall Drive
West Lafayette, IN 47907-2010
Attention: Lori Jolly-Brown

This newsletter can be accessed free at www.hort.purdue.edu/fff/.

Day-neutral Strawberries:

Strawberry cultivars are traditionally classified according to their photoperiodic flowering responses. June-bearing or short-day cultivars initiate flowers under short-days (day length less than 12 hours). They generally have only one flush of harvest that peaked around June. Unlike more widely grown June-bearing strawberries, day-neutral cultivars are insensitive to day-length with regard to flower initiation. They produce fruit as long as temperature is between 40 °F and 85 °F. Thus they are most adaptive for production systems designed for long seasons, and they can be planted either in the spring or in the fall.

We included three day-neutral strawberry cultivars 'Albion', 'San Andreas' and 'Sweet Ann' in our high-tunnel strawberry variety trial. They were planted on August 27. By late September, all the three day-neutral cultivars have flowered (Fig.5). Among the three cultivars, 'Albion' bloomed the earliest, with a few berries ripened already (Fig. 6). Canopy size of 'Albion' is slightly smaller compared with 'San Andreas' and 'Sweet Ann'. (Guan)

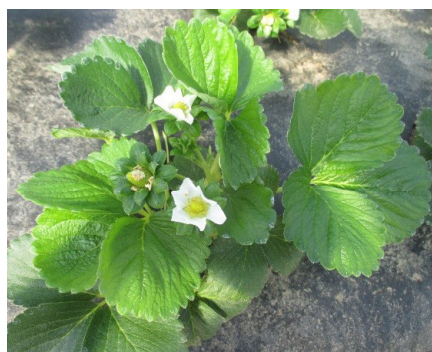


Fig. 5 Day-neutral strawberry in bloom



Fig. 6 First ripe fruit on Albion

CrimsonCrisp™:

This is a relatively new, late season, firm red apple with excellent fruit finish and flavor (Fig. 7). It's popular



Fig. 7 CrimsonCrisp™ fruit

with consumers and is a good fit for retail orchards in the Midwest. CrimsonCrisp™ retains its crispness on the tree over a long period without dropping, so is well suited for U-pick.

The cross was made at Rutgers University between two numbered selections (PRI 669-205 and PCFW2-134) in 1971. The seeds were shipped to Purdue where they were screened for scab resistance and planted out. The seedling that later became CrimsonCrisp™ was selected by E.B. Williams in 1979. It was given the name Co-op 39 and the name of the fruit has since been trademarked as CrimsonCrisp™.

It forms a fairly vigorous tree, and

does well on dwarfing rootstocks. It contains the Vf scab resistance gene and has field immunity to apple scab. Fruit size is medium large and has quite uniform fruit size and shape.

If Pixie Crunch is a no brainer for retail-oriented apple operations, then CrimsonCrisp™ is in the same category and definitely worth planting a few. (Hirst)

Beginning Apple Growing Workshop:

<http://www.inhortcongress.org/>

I hope growers have the Indiana Horticultural Congress marked on their calendars for January 19-21, 2016. Complete information is on the Congress webpage – check back frequently as this is updated as the educational programs are finalized. On Tuesday, Jan. 19 we will be holding a day-long workshop on Beginning Commercial Apple Production. This is intended for prospective and new growers, who often have so many questions that they don't quite know where to start. This workshop might also be a useful refresher for growers who have been in the business for a while. You'll learn about technical aspects of the business such as rootstocks, pollination, cultivars, fruit maturity, storage, etc. We'll also be hearing from established growers about what they wished they knew when they started and lessons learned over the years. This is also a good opportunity for growers to get to know other growers, suppliers and industry personnel.

There is no additional fee for attending this workshop – it's included in registration for the Hort Congress. (Hirst)

EPA Proposes Stronger Standards for People Applying Riskiest Pesticides:

Source: US Environmental Protection Agency

Posted on August 11, 2015

On August 5, 2015 EPA issued a proposal to revise the Certification of Pesticide Applicators rule. The proposed revisions will be available on <http://www.regulations.gov> under docket ID # EPA-HQ-OPP-2011-0183.

Stricter standards for those applying restricted use pesticides will help keep our communities safe, protect the environment and reduce risk to those applying pesticides. Pesticide use will be safer with more consistency in the knowledge and competency of pesticide applicators across the nation. To view the details of the proposal, follow this link: <http://www2.epa.gov/pesticide-worker-safety/epa-proposes-stronger-standards-people-applying-riskiest-pesticides>.

EPA's proposal:

Enhances applicator competency standards to ensure that restricted use pesticides are used safely.

Establishes a first time-ever nationwide minimum age of 18 for certified applicators and persons working under their direct supervision.

Requires all applicators to renew certifications every 3 years.

Requires additional specialized

certifications for people using high-risk application methods (fumigation and aerial).

Requires first time annual safety training and increased oversight for persons working under the direct supervision of a certified applicator. Training includes reducing take home pesticide exposure to protect families.

Promotes interstate recognition of applicator licenses to reduce the administrative burden for businesses that operate in multiple states.

Provides expanded options for establishing certification programs in Indian Country that acknowledge tribal sovereignty.

Clarifies and streamlines requirements for States, Tribes, and Federal agencies to administer their own certification programs.
Quick Facts on Restricted Use Pesticides & Certified Applicators:

Restricted use pesticides equal ~5% of the total pesticide products registered by EPA.

There are 1 million certified applicators nationwide.

The proposed rule could prevent up to 800 acute illnesses/year.

Estimated \$80.5 million in benefits, \$47.2 million in costs.

CiderCON 2016:

This is an annual conference for growers and makers of hard cider. The 2016 edition will be held on Feb. 3, 2016 in Portland, Oregon and offers "the latest information for commercial apple producers interested in growing cider apples for fermentation. It is presented by the leading cider fruit researchers and current cider apple growers from across the U.S." Workshop topics include:

1. The U.S. Cider Market
2. Rootstocks
3. Varieties
4. Orchard Design & Training Systems
5. Irrigation
6. Weed Control
7. Insect & Disease Management
8. Conventional, Organic, No Spray, & Other Options
9. Economics: Establishment and Production Costs

The cost is \$65 which includes lunch. Register online at:

www.ciderconference.com

(Hirst)

Current Crop Conditions in West Lafayette

Blackberry



Harvest largely completed

Grape



Grapes are post harvest to leaf fall

Apple



GoldRush currently being harvested

Upcoming events

Jan. 19-21, 2016:

Indiana Horticultural Congress,
Wyndham Hotel, Indianapolis, IN
<http://www.inhortcongress.org/>

February 3, 2016:

Advanced Cider Orchard Production
Workshop, Portland, Oregon
www.ciderconference.com

Please visit our Purdue HLA Extension
website under the Events tab for further
event details.

<https://ag.purdue.edu/hla/extension>

GoldRush fruit available from Purdue:

We have a few hundred bushels of
GoldRush available from Purdue for
growers who may be interested. We
have an excellent crop with great size
and finish that are not being used in
research and are available to growers.
If interested, please contact
Peter Hirst at hirst@purdue.edu



Janna Beckerman

Purdue University
Department of Botany &
Plant Pathology
915 West State Street
West Lafayette, IN 47907-1155
(765) 494-4614
jbeckerm@purdue.edu

Bruce Bordelon

Purdue University
Department of Horticulture &
Landscape Architecture
625 Agriculture Mall Drive
West Lafayette, IN 47907-2010
(765) 494-8212
bordelon@purdue.edu

Rick Foster

Purdue University
Department of Entomology
901 W. State St.
West Lafayette, IN 47907-1158
(765) 494-9572
rfoster@purdue.edu

Peter Hirst

Purdue University
Department of Horticulture &
Landscape Architecture
625 Agriculture Mall Drive
West Lafayette, IN 47907-2010
(765) 494-1323
hirst@purdue.edu

Wenjing Guan

Southwest Purdue Ag Center
Department of Horticulture &
Landscape Architecture
4369 N. Purdue Rd.
Vincennes, IN 47591
guan40@purdue.edu

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Purdue University
Department of Horticulture & Landscape Architecture
625 Agriculture Mall Drive
West Lafayette, IN 47907-2010
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