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## **Crop Conditions**



Peach: Redhaven harvest underway



Apple: Pristine harvest beginning



Blackberry: harvest

### continues



Grape: almost at veraison

Weather the past couple of weeks has been a bit unsettled. Many parts of the state have experienced rounds of heavy rainfall from storm fronts. More are predicted. Peach harvest is underway in Lafayette and quality is very good. Early apples such as Pristine are also ready for harvest. Summer fruit blackberry harvest continues. Spotted Wing Drosophila are prevalent in blackberries and are beginning to move into early seedless grape varieties.

## PristineTM Apple

Although Pristine<sup>™</sup> was selected in 1982, its history goes back to the early days of the PRI breeding program. From an original cross of Rome Beauty with Malus floribunda 821, selections and hybridizations were made incorporating Golden Delicious, McIntosh, Starking Delicious and Cazumat along the way. The cross that resulted in Pristine<sup>™</sup> was Coop 10 x Cazumat made in 1974 at Rutgers University in New Jersey, and Pristine<sup>™</sup> was selected at the Purdue Hort. Farm in 1982.Pristine<sup>™</sup> is a very early maturing apple usually ripening in late July in

Lafayette. It is very attractive with a clean finish (see Fig. 2). For such an early apple, it has very good eating quality, certainly much better than other very early apples such as Lodi or Transparent. The texture is crisp and flavor has a good acid/sugar balance. If fruit are allowed to become over-mature, pre-harvest drop can be severe, but with timely pickings this should be a minimal problem. Fruit stores well for up to a month or so, but usually growers will probably only store the fruit until better quality, main season fruit comes along, such as Gala. Pristine<sup>™</sup> has good field resistance to apple scab, and seems to have quite low susceptibility to fireblight and powdery mildew. Russet and skin disorders are rare, but bruising can be severe so careful handling is required. For direct marketers, Pristine<sup>™</sup> may be a very good way to kick off the apple season, or to transition from peaches into apples. But only grow them in such quantities that you can have them sold by the time main-season apples are ready.



Pristine apple

# Tissue Analysis for Grapes and Berry Crops

Plant nutritional status is important for all phases of plant growth and has a direct effect on vigor, fruitfulness, cold hardiness, and other factors. Tissue analysis is the most reliable means of determining plant nutritional status. Combined with soil testing,

tissue analysis can help pinpoint the source of problems and determine what measures may be needed to insure proper nutrition of the crop. Tissue analysis samples should be collected at the appropriate time to give the most meaningful results.

For strawberry, sample the first fully expanded leaves after renovation, usually in mid to late July. For brambles, sample leaves on non-fruiting canes (primocanes) between August 1 and 20. For blueberries sample leaves during the first week of harvest. For grapes, samples should be taken about 70 days after full bloom, usually early to mid August. Samples should be adequate in size. Collect 30-60 leaves for strawberries, brambles, and blueberries, and 100 leaf petioles for grapes (for grapes submit only the leaf petiole, or stem, for analysis, discard the leaf blade). Collect samples to represent the entire field, not just from a few plants. Sample different varieties separately. If specific problems exist, collect separate samples from both normal and problematic areas of the planting. After collection, leaves should be rinsed gently in tap water to remove any pesticide residues and dust that might affect analysis, laid out to dry for a couple of days, then bagged in paper bags for submission to the lab. Some labs offer tissue analysis sample kits.

There are several private companies and a few universities that provide tissue analysis. A list of certified soil and plant analysis testing labs serving Indiana growers is located at https://ag.purdue.edu/agry/extension/Pages/soil\_test ing.aspx

The Midwest Small Fruit Pest Management Handbook has a chapter on tissue analysis and fertilizer recommendations.

https://ag.purdue.edu/hla/Hort/Documents/Midwest% 20Sm%20Fruit%20861%201-24-11.pdf. I suggest growers refer to that chapter when reviewing tissue analysis results and recommendations.

# Japanese Beetles

From my own observations and reports from growers, it appears that Japanese beetle populations are higher than they have been for a number of years. I've seen severe damage to small fruits, as well as the Pristine apple tree in my backyard. In addition, after insecticides are applied to knock them down, populations reappear after the insecticide wears off. So, it may require more than one application to control them. Sevin and the pyrethroids will provide the best control, although Sevin may only give about 3 days of protection.

**Upcoming Events** 

Southwest Purdue Agricultural Center High/Low Tunnel Tour

co-sponsored with Dept. of Recreation, Park, and Tourism Studies at Indiana University

August 10, 2017

Vincennes, IN

Contact Wenjing Guan, guan40@purdue.edu, or Dan

Egel at egel@purdue.edu

Registration: Call 812-886-0198

Pinney Purdue Vegetable and High Tunnel Field Day
- co-sponsored with Dept. of Recreation, Park, and
Tourism Studies at Indiana University

August 15, 2017

Pinney Purdue Ag Center Wanatah, IN Contact Kym Schwinkendorf at

kschwink@purdue.edu or 219-386-5232

Registration: http://tinyurl.com/yc5lqvez or call 219-386-5232

Organic Vegetable Seed Production & Varietal Selection Workshop

August 22, 2017

West Lafayette, IN

Contact Lori Jolly-Brown ljollybr@ purdue.edu Registration: http://tinyurl.com/y7da7dsh

Hydroponic Workshop II September 8, 2017

Purdue University-HLA

Contact Lori Jolly-Brown ljollybr@ purdue.edu Register at http://tinyurl.com/yb4dnwrh

Indiana Horticultural Congress

February 13-15, 2018

Indianapolis Marriott East

Indianapolis, IN

Contact Lori Jolly-Brown @ljollybr@purdue.edu Visit www.inhortcongress.org for more details

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