

FACTS FOR *Fancy Fruit*



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Crop conditions

Harvest of early apple varieties has started, with quality generally looking good but a fair amount of apple scab showing up. Grapes are at veraison (ripening) and fall bearing red raspberries are nearing harvest.

Featured apple – Pristine™

This is the start of a new column introducing newer apple cultivars that I believe have a place in the Indiana fruit industry. In this first column, I'll discuss Pristine™, a very early maturing apple from the PRI program.

Although Pristine™ 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™ was Coop 10 x Cazumat made in 1974 at Rutgers University in New Jersey, and Pristine™ was selected at the Purdue Hort. Farm in 1982.

Pristine™ is a very early maturing apple – we've been harvesting them for about 2 weeks in West Lafayette. It is very attractive with a clean finish (see Fig. 1). 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



Figure 1. Pristine™ apple

or more, but usually growers will probably only store the fruit until better quality, main season fruit comes along, such as Gala. Pristine™ 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™ 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. (Hirst)

Grape Ripening

Grapes have reached veraison and begun the ripening process. (see Fig. 2) Harvest of early varieties will begin soon in the southern part of the state. As harvest nears, it is very important to monitor grape chemistry. Sampling should occur weekly leading up

harvest. Fruit quality is comprised of several factors, the most important of which are sugars, acids, and pH. Other factors such as phenolics and anthocyanins, terpenes, and other flavor and aroma compounds can be very important to wine quality as well. And of course, freedom from rots is an important consideration. Unlike some other fruits, grapes do not continue to ripen after harvest. Consequently, it is important to harvest grapes at the peak of quality and with the desired parameters for the intended use.



Figure 2. Marquette at veraison

Wine grape growers should have the ability to monitor sugars (with a refractometer), titratable acidity and pH (with a pH meter and burette). Equipment and supplies to measure these parameters can be purchased for about \$500. Each of these factors is important in determining proper harvest time, but none alone can accurately estimate overall fruit quality. It is the balance of sugars, acids and juice pH that is important to the wine maker. And of course, there are the subjective qualities of seed ripeness, skin tannins, aromas, etc. The Berry Sensory Analysis held last September addressed evaluation of these more subjective factors such as skin, pulp and seed maturity.

With wine grapes, all fruit of a given cultivar is usually harvested from the vineyard or block at a single time to coordinate winery activity and to reduce costs. It is important to carefully plan the harvest date to coincide with the optimum fruit quality from the entire vineyard. Most vineyards have some degree of variability in soil type and drainage, sunlight exposure, wind, insect and disease pest, nutritional status, etc. These variations can result in large differences in fruit ripeness. Fruit from adjacent vines as well as from different parts of the same vine can vary. Differences are caused by variation in crop load (pounds of fruit/vine size), cluster position, degree of sun exposure, vine vigor, and so on. Much of the variability can be reduced with proper vineyard management. A pre-harvest walk through the vineyard block should identify any clusters lagging in ripeness. In most cases, those clusters will never catch up to the rest and will only reduce the overall quality of the crop at harvest. Now is a good time to drop that undesirable fruit. Don't expect your workers to sort as they pick. Go through beforehand and eliminate the guesswork. (Bordelon)

Multicolored Asian Lady Beetle, Grapes, and Wine

The Multicolored Asian Lady Beetles or "Lady Bugs" as most of us know them, have become a serious indirect pest of grapes. Armed with a smelly defense chemical (methoxy-pyrazine), these beetles have the capability of ruining vast amounts of wine. In the past few years, we have found them congregating on certain grapes at or near harvest. They tend to stay in

the clusters through the crush and pressing operation, depositing their defense chemical (rancid aroma) into the juice, leading to a distinctive "Lady Bug" odor and flavor to the wine. Not surprisingly, most people consider this rancid odor a serious wine flaw. The problem exists across the wine regions of the eastern US and seems to be mostly a problem where grape harvest occurs late. The problem seems to be worse in central and northern Indiana, the Great Lakes region, etc. It has not been a serious problem along the Ohio River Valley. We have not seen significant numbers of Asian Lady Beetles showing up in vineyards yet this year, but it is important for growers to scout frequently as harvest nears. In a recent study we found that a single application of products containing imidacloprid (Provado or Prey) was very effective in reducing MALB in clusters. Several other products are registered for control of MALB. See the Midwest Commercial Small Fruit and Grape Spray Guide (www.hort.purdue.edu/hort/ext/sfg/) for complete information. (Bordelon)

Tissue Analysis Grapes and Small Fruits

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 ensure proper nutrition of the crop. Tissue analysis samples should be collected at the appropriate time to give the



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.

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

Current bud stages West Lafayette, IN	
Apple	Grape
	
<i>Gala apple starting to color - harvest a couple of weeks off</i>	<i>Foch at veraison</i>

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 washed gently 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 <http://www.agry.purdue.edu/ext/soiltest.html> The Midwest Small Fruit Pest Manage-

ment Handbook has a chapter on tissue analysis and fertilizer recommendations. It is available on line at <http://www.ag.ohio-state.edu/~sfgnet/> (Bordelon)

New European Red Mite Publication

I have a new publication available for your viewing online at <http://extension.entm.purdue.edu/publications/E-258.pdf>. This publication is my attempt to make better use of the medium of the internet to improve our publications. If you view it online, you will notice that there are several film clips that help to illustrate concepts. If you like, it is available as a PDF document that can be printed out as well. For those of you who have suffered through my European red mite talks for the last 20 years, there is a lot of information you have heard before. The basic principles of mite management have not changed but the system is constantly evolving because of the new miticides available, so some of the information will be new as well. Please take a look at the publication at your convenience and let me know what you think. (Foster)

Fields Days for Christmas Tree Growers

The Indiana Christmas Tree Growers' Associa-

tion is holding 2 field days this fall. The first is Saturday, Sept. 12 and will visit Evans Whispering Pines, LLC, Making memories Christmas Trees in Lafayette (limited to the first 12 that sign up) and Sickels Tree Farm in Lynn, IN. The following weekend (Sept. 19), visits will be to Eby's Evergreen Plantation, Inc. in Bristol IN and St. Joe Christmas Tree Farm in Fort Wayne. Cost per site is \$20 for members and \$30 for non-members. For more information, contact Judy Reifenberg, Secretary/Treasurer, Indiana Christmas Tree Growers' Association, Inc. Phone 877-873-3712 or email info@indianachristmastree.com

House Passes Landmark Food Safety Legislation

On a vote of 283 to 142, the U.S. House of Representatives last week overwhelmingly passed H.R. 2749, the "Food Safety Enhancement Act of 2009." The legislation is markedly improved since it was first introduced earlier this year. It is now clearly commodity-specific and risk-based as supported by USApple.

"It will fundamentally change the way in which we ensure the safety of our food supply and protect American consumers, farmers and business," said Rep. John Dingell (D-MI.), who led development of bill as a senior member of the House Energy and Commerce Committee. "A series of food-borne disease outbreaks has laid bare unacceptable gaps in our food safety laws," he said.

The just-passed House bill would significantly expand FDA authority for food safety and require the agency to establish mandatory food safety standards for the safe growing, harvesting and packaging of "high-risk" fruits and vegetables. FDA would also have to update its GAPs guidance for all fruits and vegetables.

The bill calls for more stringent traceability standards, increases reporting requirements of food handling, processing and storage facilities, and assesses various fees. It also continues the delegated authority relationship of FDA with USDA and state departments of

agriculture. However, improvements are still needed.

Food safety reform is coming and now with House action complete, attention turns to the Senate where the passage is possible this year. The Senate Committee on Health, Education, Labor and Pensions has been focusing on healthcare legislation, and has not yet indicated when they will consider food safety legislation.

USApple will work with our produce allies to ensure that the Senate bill and final legislation are reasonable, commodity-specific, and risk-based, and do not impose onerous new requirements and fees on the industry. (US Apple Association)

FSA to Implement Treasury Offset Program August 3

Indiana Farm Service Agency Acting State Executive Director, Don Hunton, announced there are two changes producers will see with the Treasury Implementation Project that will begin August 3, 2009.

The first, will be that all payments the USDA Farm Service Agency makes by direct deposit will be transmitted by Kansas City to Treasury. This is required for FSA to be compliant with the Debt Collection Improvement Act of 1996 (DCIA). All Federal payments will be processed through the Treasury Offset Program (TOP), so that any delinquent Federal debt can be offset.

According to Hunton, this new process will result in a delay of direct deposit payments to customers by one business day. All payments will be matched against debt referred to Treasury, including payments made by Treasury check. Payments will be subject to TOP offset if there is a delinquent Federal debt in TOP database. If the TOP database finds a match for taxpayer identification number (TIN) and name, the payment will be offset for the delinquent debt. Treasury will notify the payment recipient of any offsets taken for debts due other agencies. FSA will not receive notification of the offset.

If there are questions about a TOP offset, the payee may call the TOP Call Center at 1-800-304-3107 to obtain the contact information for the offsetting agency. The TOP Call Center only has access to provide the name of the offsetting agency and their contact information. The payee will need to call the offsetting agency to determine the origination of the debt.

The other change will be the description on Bank Statements of Direct Deposit Payees. Currently, the description on the payee's bank statement reads, "USDA-FSAKCMOCDSP". After August 3, 2009, the description on the bank statement will read, "FSA TREAS 310" for all payments that are disbursed by Treasury. (USDA-FSA)

Upcoming meetings

Aug. 6-9

46th Annual National Blueberry Festival, South Haven, MI. For more information www.blueberryfestival.com

Aug. 11-12

NASGA 2009 Summer Strawberry Tour. Chicago, IL. For more information contact Kevin Schooley, 613-258-4587, or www.nasga.org.

August 20-21

Apple Crop Outlook and Marketing Conference. US Apple Association. Ritz Carlton Hotel, Chicago. For details, visit www.usapple.org

Dec. 8-10

Great Lakes Fruit Vegetable and Farm Market Expo. DeVos Place Convention Center, Grand Rapids, MI. For more information: www.glexpo.com/index.php

2010

Jan. 4-5, 2010

Kentucky Fruit and Vegetable Conference and Trade Show. Embassy Suites Hotel, Lexington, KY. Contact John Strang 859-257-5685.

Jan 6-8

Illinois Specialty Crops and Agritourism Conference. Crowne Plaza Hotel and Convention Center, Springfield, Ill. For more information contact Diane Handley 309-557-2107, or handley@ilbf.org.

Jan18-20

OPGMA Congress, The Nia Center at the Kalahari Resort, Sandusky, OH. For more information: www.opgma.org

Jan. 19-21

Indiana Horticultural Congress, Wyndham Hotel, formerly Adam's Mark Hotel, Indianapolis. More information: www.inhortcongress.org

Feb 5-12

NAFDMA's 25th Anniversary Convention, Lancaster PA. More information: www.nafdma.com/



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