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**Crop conditions:** Peach harvest is underway across the state, generally with good crops being reported. Early apple varieties are being harvested, with Gala harvest underway now in southern areas of the state. Early varieties of grapes are being harvested this week in southern areas. The recent cool temperatures are giving us excellent fruit quality. In general, it appears that grape harvest will be about a week later than normal.

**Purdue Fruit and Vegetable Connection:** In a recent edition of Facts for Fancy Fruit, we announced a new website, the Purdue Fruit and Vegetable Connection. As some of the more observant among you have found out, the web address we listed was incorrect. The correct web address is:

[www.hort.purdue.edu/fruitveg](http://www.hort.purdue.edu/fruitveg)

Thanks to those folks who let us know and gave us some feedback. This site will be updated and improved frequently, so check back often. (Hirst)

**Apple Maturity Determination:** Determining exactly when to harvest can be a tricky issue. Looking at an historical calendar date may get you in the right ballpark, but you can become unstuck relying on historical averages if a particular year is running ahead or behind the average. Many tests can be performed to measure fruit maturity, such as firmness, soluble solids concentration (also known as sugar levels or Brix), starch, ethylene, seed color, skin color, etc. I don't know of any growers in the state who do all of these, and I

wouldn't recommend going that far with it. If fruit are to be stored for a long period, or put into CA storage, then maturity at harvest is a lot more critical than if fruit is to be sold immediately. In Indiana, the majority of growers plan on selling fruit immediately or maybe storing it for just a short period. If this describes your situation, then taking a bite out of the fruit is a good test. An experienced taster can tell a lot from taste – sugar, starch, and fruit firmness can all be determined by the taste test. If you are going to do one single test, I would recommend the starch-iodine test.

As fruit ripen, starch is converted to sugar, so that over time starch will decrease and sugar will increase (that's why riper apples taste sweeter – more sugar). The more starch that is present in a fruit, the less ripe it is. To test for this, cut the fruit in half transversely (crossways) and either dip it in an iodine solution or spray the fruit with the solution from a spray bottle. In less than a minute, the iodine will stain the starch black. For fruit to

be sold immediately, harvest when there is just a small amount of starch in the fruit. For storing fruit for longer periods, more starch should be present at harvest. Remember, that the fruit will continue to respire and convert starch to sugar in cold storage – cold storage doesn't stop this process, it just slows it down.

To make the iodine solution:

Mix 10 g of potassium iodide and 2.5 g of iodine in 1 liter of water – it will dissolve better if the water is hot. **WARNING:** iodine fumes are hazardous so make sure you mix this solution in a well-ventilated place. Your local pharmacist may be able to produce this solution for you. Keep the solution away from light in a brown bottle or wrap the bottle in aluminum foil. The solution will keep for the whole season.

Further information:

See pages 97-99 of the Midwest Tree Fruit Pest Management Handbook.

[http://www.ca.uky.edu/agc/pubs/id/id93/ch\\_7.pdf](http://www.ca.uky.edu/agc/pubs/id/id93/ch_7.pdf)

**Apple Anti-Cancer Statement:** U.S. apples and apple products can now be labeled with a new statement promoting their cancer-fighting capabilities. The new “dietary guidance statement” unveiled last month informs consumers that “diets rich in fruits and vegetables may reduce the risk of some types of cancer and other chronic diseases.” The new dietary guidance statement is a collaborative effort between the National Cancer Institute and the FDA (Food and Drug Administration).

The statement can be used on packaging signage, and in advertising. Apple juice and cider containing 100% apple product, and processed apple products containing no added sugars or fats are also eligible to use the statement.

We already know the products we produce are healthy, so let's remind our customers and potential customers of this. (Hirst from U.S. Apple News)

**Sooty Blotch & Flyspeck:** Apple fruit are already showing the dark smudges and black speckling indicative of sooty blotch and flyspeck. Yes, this is turning into a ‘good’ sooty blotch and flyspeck year. These diseases are best managed if fungicide applications are maintained on a regular schedule throughout the summer months. They become a problem when the time between sprays is stretched too long (4 weeks between sprays just won't cut it) and/or when spray applications are stopped too early in the season. Check harvest restriction days on the pesticide container label and **MAINTAIN** fungicide applications on a **REGULAR SCHEDULE** up to the cut-off period. See ID-168, “2003 Indiana Commercial Tree Fruit Spray Guide”, and previous editions of this newsletter for recommended fungicides. Also, the strobilurin fungicides, Flint and Sovran, are excellent in control of SBFS; however we **STRONGLY** suggest no more than three sprays of the strobilurins per year, and as the label states: “do not apply as the final spray of the season.” Infection from sooty blotch and flyspeck can further be reduced through IPM strategies that lower humidity and promote rapid drying. Also, remember to remove reservoir hosts, particularly brambles, from the orchard and surrounding hedgerows to help reduce the level of incoming spores. (Pecknold)

**Apple Diseases:** Apple scab and fire blight have been the two major disease problems on apples this year. Both northern and southern Indiana growers have reported moderate to severe infection on susceptible apple varieties. In most years, the hot, dry weather of summer will help minimize spread and/or infection from both scab and fire blight. I'm starting to think that may never occur this year, which is even more reason to stay alert for apple diseases of all sort. I hate to preach but ... now is a good time to analyze just where you went wrong in your scab and/or fire blight management programs. When disease control practices fail, the fault generally lies in ourselves, not in the pesticide. (Pecknold)

***Asian Lady Beetle Problem:*** The Multicolored Asian Lady Beetles or “Lady Bugs” as most of us know them have become an indirect pest of grapes. In the past couple of years, we have found them congregating on certain grapes at or near harvest and they tend to stay in the clusters through the crush and pressing operation, leading to a distinctive “LB” odor and flavor to the wine. Most people consider this herbaceous odor and flavor 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 after soybeans begin to senesce. At that point the beetles leave soybeans and search for alternative food sources. Grapes apparently are high on their list of favored foods. 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. However, we need growers and winemakers to help us monitor this pest. We would like to know when you notice significant numbers of Asian Lady Beetles showing up in your vineyards, what varieties they seem most attracted to, and at harvest, if they are present in harvested clusters. (Bordelon)

***Pocket Guide for Grape Pest Management:*** Michigan State University and Cornell University extension specialists have produced a guidebook for grape growers in the east and Midwest called *A Pocket Guide for Grape IPM Scouting in the North Central and Eastern U.S.* The pocket guide was developed to help grape growers identify nutritional disorders, herbicide damage, grape diseases and insect pests and their natural enemies. At over 100 pages, the guide contains hundreds of photographs and descriptions and has a scouting calendar for pests and diseases. The Guide is a bargain at \$13.00 (S&H are included), and can be ordered (MC and Visa accepted) by calling the Michigan State University Extension Distribution Center at: 517-353-6740. Ask for publication # E-2889. You may also send a check to

MSU Distribution Center, Rm 117, Central Services Bldg., MSU, East Lansing, MI 48824-1001. (Bordelon)

***International Peach Symposium:*** The 6th International Peach Symposium will take place in Santiago, Chile, January 10-14, 2005. Leading peach researchers, extension personnel and growers are likely to attend. If you're interested in what's happening on the cutting edge with peaches in terms of economics, breeding and biotechnology, rootstocks and orchard systems, fruit and tree development, irrigation management, pest management, fruit quality, and post harvest biology and technology, then you should consider attending. For more information, consult the web page [www.peach2005.cl](http://www.peach2005.cl)

***Abundant Harvest of Indiana:*** As harvest season starts, we'd like to remind you of this group and provide some contact information. Abundant Harvest of Indiana (AHI) is a non-profit organization, based in Hancock County, devoted to increasing the quantity and quality of produce donated to Indiana food banks. Abundant Harvest of Indiana compensates Indiana produce growers that share the produce they normally till under each year with their local food bank. In exchange for the gracious donation of fresh produce by growers, AHI reimburses them for the cost of harvesting, grading, washing, packing and delivering the produce to their local food bank.

If you have surplus produce that you would like to contribute to Abundant Harvest of Indiana, please contact the director, Stanley Parker: Phone 317-861-8146, Fax 317-861-8378

***Upcoming meetings:***

**Jan. 26-28 2004** Indiana Horticultural Congress. Put the date on your calendar and plan to attend.

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