



Newsletter

Extension

Fruit ICM News

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Calendar

November 20, 2003 - Food Safety Workshop II - Managing Liability for Fruit and Vegetable Growers, Marriott North Hotel, Columbus, Ohio.

Honeycrisp Harvest Recommendations

Source: Healthy Fruit, U of Mass., Issue 21 - Sept.10, 2002

Many growers have planted Honeycrisp in response to market demand and the (mostly) desirable and unique characteristics of the apple. Although not all the bugs have been worked out, considerable effort by researchers in New York, Michigan, and Massachusetts over the past few years has gone into developing preliminary harvest and storage regimes for Honeycrisp.

At this point, our best recommendations for harvesting and storing Honeycrisp are as follows:

- Harvest during the early- to mid-range of its picking season. The first or second week in September are appropriate for the start of Honeycrisp harvest in warmer areas. Start to pick Honeycrisp when Starch-Index (SI) readings are in the 5-6 range. Deepening red skin color will be your key to picking; however, fruit may still be "green" when ready to harvest. Honeycrisp **does** respond well to the SI test and it is a reliable indicator of maturity. Skin color and taste are also appropriate indexes of maturity. Stressed trees (mites, nutrient deficiencies) will drop readily.
- There are some indications Honeycrisp is sensitive to cold injury -- including soft scald -- during storage, so storage temperatures of 36-38 F. are recommended. If harvested earlier enough, Honeycrisp are not likely to soft scald in storage. Honeycrisp stored at or near 32F are more likely to soft scald than those stored at higher temperatures, particularly if harvested late. Honeycrisp does not lose (much) firmness in storage, thus the benefits of colder temperatures in storage are somewhat nonexistent.

- Monitor fruit for off-flavor development at harvest and during storage. Again, when compared to fruit stored at lower temperatures, a storage temperature of 38F seems to inhibit formation of acetaldehyde, ethylacetate, and ethanol, which contribute to off-flavor development in Honeycrisp (NY data). Whenever off-flavors are detected in Honeycrisp fruit, it is best to avoid the fresh-market so as not to ruin Honeycrisp's reputation. This is best avoided by harvesting Honeycrisp at the proper maturity.

Fire Blight Cankers: An Important Inoculum Source

Source: George Sundin, Plant Pathology, Mira Danilovic, Oceana County MSU Extension, Mark Longstroth, Van Buren County MSU Extension, Jim Nugent, Northwest Hort. Res. Station, Phil Schwallier, Clarksville Hort. Expt. Station, Bill Shane, SWMREC, Bob Tritten, Genesee County MSU Extension, MSUE Fruit CAT Vol. 18, No. 18, September 23, 2003

Fire blight cankers are an important inoculum source. The fire blight bacterium, *Erwinia amylovora* (Ea), overwinters in cankers, and these cankers can be sites of further fire blight spread both in the tree and in the orchard. As temperatures warm in the spring, cankers begin to ooze; the ooze is a sign of increased bacterial activity and marks the beginning of fire blight's recolonization of the orchard in the spring. The ooze is a source of Ea that can be rapidly and easily spread by wind and rain. Orchard blocks with fire blight cankers are under a tremendous infection risk.

The earlier that warm daytime temperatures (70-80F) occur in the growing season, the risk of fire blight symptom occurrence increases. If these temperatures occur during bloom, extensive blossom colonization followed by blossom blight will most likely occur. Blossom infections can be initiated by inoculum from cankers. In the early stages of canker activation, insects are attracted to slightly gooey cankers and can pick up enough fire blight bacteria to spread the disease to highly susceptible blossoms. Newly opened flowers are attractive to the insects when temperatures rise above approximately 55F and the stigma (pollen receptors) exude sticky substance.

If warm temperatures do not occur until later (as happened in 2003), blossom blight won't be a problem, but shoot blight will. The presence of cankers does not guarantee that extensive shoot blight infection will occur, and some growers may have gotten lucky this year. However, in the long-term, cankers raise the overall infection risk and are a **consistent** source of disease-causing Ea.

The annual removal of fire blight cankers in the dormant season greatly reduces the amount of fire blight in the orchard in the spring. Removing cankers is an important risk reduction measure for future fire blight infection. By actively removing cankers, especially after there has been only a little fire blight, you greatly reduce the inoculum in your orchards. Removing all the cankers in an orchard is easier to do when the number of cankers is small. In years such as 2000, with extensive long-range spread of the pathogen, a good canker removal program does not prevent fire blight epidemics if your neighbor does not have similar pruning practices. However, in years like 2003 with a delayed epidemic and little orchard-to-orchard spread, a thorough canker removal program really pays off.

Scout orchards for fire blight cankers this fall. Prune those limbs at least 1 to 2 feet below the canker margin, and burn that wood. You should also scout the orchard in the spring, looking for and cutting out any cankers that the pruning crew missed. It is easier to see the blackened and sunken cankers when the sun is behind you, so scout one side of the tree in the morning and the other side in the afternoon.

Mark Longstroth will be adding a new page entitled *Annual Cycle of Fire Blight in Michigan Apples* to his extensive web site devoted to fire blight. This page will include several photos of fire blight cankers.

The URL will be: <http://www.msue.msu.edu/vanburen/fbyear.htm>.

Quick Guide to Chokecherry ID for X-Disease Management

Source: Bill Shane, District Agent, SW Michigan Research and Extension Center, MSUE Fruit CAT Vol. 18, No. 18, September 23, 2003

X-disease is a sometimes severe phytoplasma-type disease of peaches and cherries in Michigan and other northern states. X-disease is commonly spread from infected chokecherry into Michigan peach and cherry orchards by specific leafhoppers. One of the best strategies for controlling X-disease is to remove chokecherry bushes from the vicinity of stone fruit orchards. This article provides a brief summary of key points for identifying chokecherry, in part from the excellent guide for identifying chokecherry written in 1977 by Alan Jones and David Rosenberger, *X-Disease of Peach and Cherry: A Guide to Chokecherry Identification*, Michigan State University Extension Bulletin E-842.

Chokecherry (*Prunus virginiana* L.) can be confused with wild black cherry (*P. serotina* Ehrh) and pin cherry (*P. pennsylvanica* L., also called fire cherry). Wild black cherry is very common in woods along orchards and can grow to heights of 80 feet or more, whereas chokecherry and pin cherry rarely reach more than 30 feet tall and tend to be more bush-like in appearance.

Pin cherry produce fruit in clusters, with stems arising from the same point, whereas chokecherry and wild black cherry bear fruit on a central axis, raceme (Figure 1) **Note Figures 1-3 can be found at http://www.ipm.msu.edu/CAT03_fr/F09-23-03.cherry.htm**. Wild black cherry can be easily distinguished from chokecherry by examining fruit. Wild black cherry retains a calyx cup remnant on fruit (on the stem end of the fruit) and chokecherry has no remnant.

The leaves of common chokecherry and wild black cherry are distinctly different. The underside of wild black cherry leaves has a brown hairy midvein at the base, adjacent to the petiole (Figure 2), whereas chokecherry has a smooth midvein. The leaf shapes of the two cherry species are much different. Wild black cherry leaves are longer and narrower than common chokecherry (Figure 3), whereas leaves of the common chokecherry tend to be wider toward the tip. Remember to take time to examine several leaves and fruit per plant to avoid being misled by an atypical specimen.

Fruit Observations & Trap Reports

Insect Key

AM: apple maggot
CM: codling moth
ESBM: eye-spotted budmoth
LAW: lesser apple worm
LPTB: lesser peachtree borer
OBLR: obliquebanded leafroller
OFM: oriental fruit moth
PTB: peachtree borer
RBLR: redbanded leafroller
SJS: San Jose scale
STLM: spotted tentiform leafminer
TABM: tufted apple budmoth
VLR: variegated leafroller

Site: Waterman Lab, Columbus

Dr. Celeste Welty, OSU Extension Entomologist

Apple: 9/17 to 9/24/03

CM: 6.0 (up from 5.7)

LAW: 0 (down from 1)

RBLR: 1 (down from 13)

VLR: 2 (up from 1)

Peach: 9/17 to 9/24/03

LPTB: 0 (same as last week)

PTB: 0 (down from 1)

Terminal Market Wholesale Fruit Prices September 24, 2003

Source: Chicago http://www.ams.usda.gov/mnreports/HX_FV010.txt

Detroit http://www.ams.usda.gov/mnreports/DU_FV010.txt

Pittsburgh http://www.ams.usda.gov/mnreports/PS_FV010.txt

Chicago

Apples

Cartons cell-pack

		<u>Terminal Market</u>
U.S. ExFcy McIntosh	NY 80s 26-27.00	Chicago
U.S. ExFcy McIntosh	MI 96s 21-23.00	Detroit
U.S. ExFcy McIntosh	NY 100s 24.00, 120s 21.00	Detroit
U.S. ExFcy McIntosh	NY 100s 25.50	Pittsburgh
Comb U.S. ExFcy-US McIntosh	NY 100s 17.75-19, 120s 16.50	Pittsburgh

Cartons tray-pack

U.S. ExFcy Ginger Gold	MI 125s & 138s 16.50	Pittsburgh
U.S. One Paula Red	NY 100s 17.50	Pittsburgh

12 3-lb filmbags

U.S. ExFcy Empire	MI 2 ½" min 15-15.50	Detroit
U.S. ExFcy Gala	MI 2 ½" min 12-14.50	Detroit
U.S. ExFcy Ginger Gold	MI 2 ½" min 12-13.50	Detroit
U.S. ExFcy Ginger Gold	MI 2 ¼" min 11.75	Detroit
U.S. ExFcy Golden Delicious	MI 2 ½" min 12.00	Pittsburgh
U.S. ExFcy Gold Supreme	MI 2 ½" min 12.00	Detroit
U.S. ExFcy Jonamac	MI 2 ½" min 14-14.50	Detroit
U.S. ExFcy McIntosh	MI 2 ½" min 12-15.50	Detroit
U.S. ExFcy McIntosh	MI 2 ¼" min 11.75	Detroit
U.S. ExFcy Paula Red	MI 2 ½" min 12-13.00	Pittsburgh
U.S. ExFcy Paula Red	MI 2 ¼" min 11.75	Detroit
U.S. ExFcy R. Delicious	MI 2 ½" min 12-14.50	Pittsburgh
U.S. ExFcy Royal Gala	MI 2 ¼" min 13.00	Detroit
U.S. Fcy Early McIntosh	MI 2 ½" min 12.00	Pittsburgh
U.S. Fcy McIntosh	MI 2 ¼" min 12.00	Detroit
U.S. Fcy Paula Red	MI 2 ½" min 12.00	Detroit
Comb U.S. ExFcy-U.S. Fcy McIntosh	NY 2 ¼" min 12.75-13	Detroit

Bushel cartons loose

U.S. Fcy Early McIntosh	MI 2 ½" up 12.00	Detroit
U.S. Fcy Gala	MI 2 ¾" up 12-15.00	Detroit

U.S. Fcy Gold Supreme	MI 2 ¾" up 12.00	Detroit
	MI 3" min 14-15, 2 ½" up 12.00	Detroit
U.S. Fcy Greening	MI 2 ¾" up 15.00	Detroit
U.S. McIntosh	MI 3" min 12.00	Detroit
U.S. Paula Red	MI 3" min 12.00, 2 ½" up 10.00	Detroit

Blueberries

Flats 12 1-pt cups	MI lge 23-26.00, med 23-24.00	Chicago
	MI med 20.00-23.00	Detroit
Flats 12 6-oz cups	MI med 13-15	Chicago
	MI med 12-16.50	Detroit
	MI med 12.00	Pittsburgh

Nectarines

½ bushel loose

U.S. One Fantasia	MI 2 ¾" up 12-12.50	Detroit
U.S. ExOne various yellow flesh varieties	MI 2 ¾" up 19-20.00	Detroit
Sunglo	NJ 2 ½" up 17.50, 2 ¼" up 12.75	Pittsburgh

Peaches

25 lb cartons

loose no grade marks, various yellow flesh varieties	NJ 2 ¾" up 9.00, NJ 2 ½" up 7.00, 2 ¼" up 5.00 WV 2 ½" up 10.00, 2 ¼" up 8.00	Chicago Chicago Chicago
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½ bushel cartons

U.S. One various yellow flesh varieties	MI 2 ¾" up 14.50-15 MI 2 ½" up 11.50-12.00	Detroit Detroit
U.S. ExOne Flavorcrest	NJ 2 ½" up 12.00	Pittsburgh

½ bushel cartons

no grade mark, various yellow flesh varieties	NJ 2 ¾" up 8.00-10.00 NJ 2 ½" up 6.00-8.00 NJ 2 ¼" up 4.00-5.00	Detroit Detroit Detroit
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Pears

½ bu cartons

U.S. One Seckel 108s, 10-2 lb bags	NY 1 ¼" min 17.50	Pittsburgh
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Prune Plums

30 lb cartons

U.S. One Stanley	MI 1 ¼" min 13.50-14.00 MI 1 ¼" min 12.50-15.00 MI 1 ¼" min 13-14.50	Chicago Detroit Pittsburgh
U.S. One Bluefire	MI 1 ¼" min 15.00	Detroit

The intent of listing terminal market prices is to provide information available in the public domain. It is not intended for price setting, only to assist growers in evaluating the value of their crops. Producers need to remember that the prices listed are gross, and consideration must be given to marketing costs, including commission, handling charge, gate fees, and possible lumper

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Information presented above and where trade names are used, they are supplied with the understanding that no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

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