

Kentucky Fruit Facts

September/October 2004 (9&10/2004)

Fruit Facts can be found on the web at: <http://www.ca.uky.edu/fruitfacts/>

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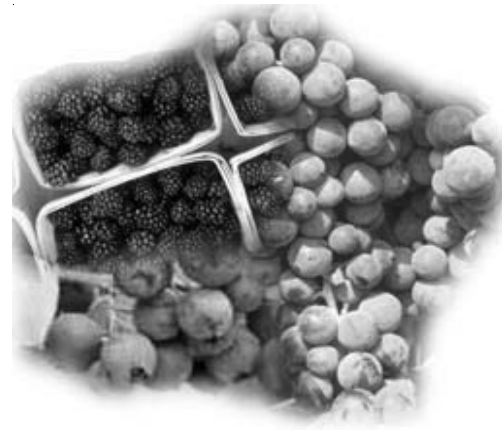
Fruit Crop News

John Strang, Extension Horticulturist

Apple harvest is almost over. Fruit color and size are outstanding due to the cool weather, however we are seeing a little more cork spot due to larger fruit sizes. Sales of fruit and cider have been good.

Grape growers should be making sure that they get on one or two downy mildew and powdery mildew sprays following harvest. This is particularly important on susceptible European and American French hybrid varieties. If disease takes the leaves off, the carbohydrates and nutrients that those leaves would have sent to the roots for spring growth are lost and winter hardiness development will be slowed or reduced. It won't be long before the growers should begin covering European grape graft unions with soil to protect them from low winter temperatures.

Matt Ernst and Tim Woods in the UK Department of Agricultural Economics have



made their final update on The 2004 Regional Winegrape Price Survey that was in last month's Fruit Facts. It can be found on the web at: www.uky.edu/Ag/NewCrops This update includes the results from several more winery surveys as well as prices per pound paid for winegrapes.

Upcoming Meetings

Oct. 6 Blueberry Field Visit, Roland McIntosh farm, Stanton, KY. 5:30-6:30 p.m. Contact Matt Ernst Email matt.ernst@uky.edu, Phone 859-257- 7272 ext. 223. See article below.

Oct. 16 Kentucky Vineyard Society Fall Meeting, Paraquet Springs Conference Center, Shepherdsville, KY. Registration is \$20.00, which includes lunch. Contact Jim Wight 502/543-8681 home, 502/807-8681 cell. See below for more information.

Nov. 3-5 Kentucky Women in Agriculture, Celebrating Success~Producing a Future, 5th State Conference, Clarion Hotel & Conference Center, Louisville, KY. See web site for program and registration information: www.kywomeninag.com or call Kim Henken 859/257-7775. Pre registration is required.

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Nov. 6 Kentucky Blueberry Growers Association Meeting, Metcalfe County Extension Office, Edmonton, KY. Contact Larry Martin Sr., 270/432-5836.

Nov. 12-13 Midwest Apple Improvement Association Meeting, Dawes Arboretum, 7770 Jacksontown Rd., Newark, OH . See program below.

Nov. 16-18 Small Farm Conference, Kentucky State University Research Farm, Frankfort, KY. Contact Louie Rivers 502/597-6327 e-mail: lrivers@gwmail.ksu.edu See program below.

Jan. 3-4, 2005 Kentucky Fruit and Vegetable Conference and Trade Show, Holiday Inn North, Lexington, KY. Contact John Strang 859/257-5685.

Feb. 16-19, 2005 Joint Meeting of the North American Strawberry Growers Association and North American Bramble Growers Association. Nashville, TN

Blueberry Field Visit, October 6

by Matt Ernst

A blueberry field visit will be held on Wednesday, October 6, from 5:30-6:30 pm at Roland McIntosh's in Stanton Kentucky. The visit will be hosted by Matt Ernst (Ag Economics), Terry Jones (Horticulture), and Roland McIntosh. Visitors will view a 1/3-acre blueberry planting and hear lessons learned and results gathered from the first season of a Southern Region SARE On-Farm Research Grant, "Production Costs and Techniques for Blueberry Establishment in Eastern Kentucky." Light refreshments will be provided.

Directions: Take Mountain Parkway to Stanton/Hwy 213 (Exit 22). Hwy 213 south ¼-mile (past McDonald's), pass UPS on right, turn right at Caudill Rd. Take Caudill Rd. up the hill, past pair of sky blue/black mailboxes, then turn left into gravel driveway with mobile home and white house on the hill.

Questions? Contact Matt Ernst, E-mail matt.ernst@uky.edu; Phone 859-257-7272 ext.223.

Midwest Apple Improvement Association 2004 Annual Meeting, November 12-13

Location:

Dawes Arboretum
7770 Jacksontown Rd.
Newark,OH (Exit 132 off I-70 east of Columbus)

Program

Friday Nov. 12

7:00-9:00 p.m. MAIA Directors Meeting, Lobby of Courtyard by Marriott Motel, 500 Highland Blvd., Newark OH
Phone: 800/321-2211

Saturday, Nov. 13

8:00 - 8:30 am Registration

8:30 - 9:00 Opening Remarks - Pres. Jim Eckert, Eckert Orchards

9:00 - 9:45 The Apple of My Eye - Breeding Objectives of NJAES Apple Breeding Program
- Dr. Joe Goffreda, Rutgers University

9:45 - 10:30 Redefinition of MAIA Breeding Objectives; Early Severe Screening
- Mitch Lynd, Lynd Fruit Farm

10:30 - 11:45 Sampling Apples from MAIA Seedlings
- Tour Kazah Seedling Orchard

11:45 am-1:00 pm Lunch (catered)

1:00 - 1:45 Choosing the Best Parents
- Look to the Inner Core
- Dr. Joe Goffreda, Rutgers University

2:00 - 2:45 Caravaggio's Fruits
- Mirror on Baroque Pomology
- Dr. Jules Janick, Purdue University

2:45 - 3:15 Break

3:15- 4:30 Closing Remarks - MAIA and the Future? - Pres. Jim Eckert

Small Farm Conference, Preliminary Program, Nov. 16- 18

All times are eastern time

Nov. 16 - Holiday Inn, Frankfort

10:30 a.m. - 5:00 p.m. Registration
12:30 p.m. Load Bus for Tour of Horse Farm
1:30 - 3:30 p.m. Tour of Win Star Horse Farm
5:00 p.m. Welcome from Mayer, County Judge Executive, KSU President,
USDA and Presentations
Reception - Mexican Buffet

November 17

6:30 a.m. - 7:30 a.m. Breakfast
7:30 a.m. Bus to KSU CEP
8:00 a.m. - 8:30 a.m. Presentation of Colors
The Occasion - Dr. Harold R. Benson, Michael Tate,
Director Washington State University Extension
8:30 a.m. - 9:00 a.m. Land Loss/Land Ownership Rights
- Faith Rivers, South Carolina Bar Foundation
9:00 a.m. - 9:30 a.m. Land Loss
- Miessha Thomas, Federation of Southern Cooperatives
9:30 a.m. - 10:00 a.m. Forest Inventory Analysis Data
- Leah MacSword, Kentucky Division of Forestry
10:00 a.m. - 10:30 a.m. Break
10:30 a.m. - 11:30 a.m. Estate Planning
- Keith Jeffries, Attorney Specializing In Agriculture Law
11:45 a.m. - 1:45 p.m. Luncheon and Program - KSU Ballroom
Reflections - Lois Jackson and Shayla Watson
Keynote Speaker - Vernon Parker, Assistant Secretary Civil Rights, USDA
Open Discussion with Secretary Parker
2:00 p.m. - 3:00 p.m. Concurrent Sessions: Governor's Office of Ag Policy,
Risk Management, Kentucky Department of Agriculture,
Kentucky Conservation, Kentucky Water Quality,
Natural Resource Conservation Service
3:00 p.m. - 3:15 p.m. Break
3:20 p.m. - 4:20 p.m. Farmer Success Stories: Rossenau Elam, Logan County
Beth Tillery and Jane O'Tiernan
4:30 p.m. Bus to hotel

Wednesday Evening, November 17, Holiday Inn

6:30 p.m. Banquet - KSU Choir, NRCS Small Farmer Award
Keynote Speaker - President Mary Sias, Kentucky State University

November 18

8:00 a.m. - 10:00 a.m. Health Screening/Health Fair/Farm Safety
9:30 a.m. - 10:15 a.m. Continental Breakfast at KSU Research Farm
10:15 a.m. - 3:00 p.m. "Third Thursday Thing" - Livestock Identification Program,
Beef Cattle Training Program, Hands-On Workshops

Peach Anthracnose Fruit Rot on the Increase

by John Hartman, U.K. Extension Plant Pathologist

Peach growers in some regions of Kentucky are observing increased levels of a fruit rot that appears to be new to our growers. The disease, called anthracnose, or sometimes referred to as crater rot, is caused by a fungus called *Colletotrichum gloeosporioides*. It was first noticed on a few peach trees in a western Kentucky orchard a few years ago and is now appearing in other orchards as well. The fruit rot disease appears to affect nearly all peach cultivars and may appear continuously from June through August.

Symptoms. The peach anthracnose being observed here is characterized by circular, sunken, tan lesions on ripening fruit. The sunken lesions have a glistening or slimy surface, unlike brown rot disease with which it could be confused. Lesions may begin as small chlorotic spots on the fruit surface and gradually enlarge so that the rotted tan spot is visible. The decay continues to enlarge to an inch or two inches in diameter, by which time the fruit is significantly decayed. Decay can be quite extensive in fruits on the tree and they continue to rot after harvest. When the decay becomes quite advanced, the fruit surface eventually takes on a grayish black color. Leaf and twig symptoms are generally not seen with this disease.

The fungus we have isolated from current season fruit decay appears to produce spores slightly smaller than those reported for *C. gloeosporioides*, but they are the same shape and appear to be unlike a related fungus, *C. acutatum*, which also causes peach anthracnose. However, these fungi are sometimes difficult to tell apart. Similar *Colletotrichum* fungi also cause bitter rot of apple and anthracnose of strawberry.

Disease development. The fungus overwinters in mummified fruit and in twig and bark cracks and crevices. The fungus *Colletotrichum* has a wide host range including herbaceous annuals and perennials as well as woody plants and other fruit crops. Because of this wide host range, the disease can become

easily established in the orchard. Fungal spores are spread through splashing rain and infections are favored by warm, moist weather. Although symptoms are found primarily on ripe or ripening fruit, infections could occur during bloom and the fungus could then remain latent in developing fruit. The reason for outbreaks of the disease in Kentucky this year could be related to wet spring and summer weather.

Disease management. Sanitation, the removal of mummies and rotted fruit from the orchard, should be helpful in reducing disease. Removal of wild *Prunus* species growing near the orchard should also be helpful. Anthracnose disease management with fungicides is difficult because many of the widely used brown rot fungicides such as sulfur are not very effective against this disease. Captan, a fungicide registered for peaches, has activity against anthracnose and should suppress the disease. A combination of Elite (tebuconazole) and a strobilurin-containing fungicide such as Pristine (both registered for peaches) may also help and could be alternated with captan. Fungicides need to be applied season long from bloom to harvest.

Tree Fruits - Disease Control in Late Summer and Fall

by John Hartman

Now, while memories of the growing season are still fresh, is a good time for apple and peach growers to assess their disease management successes and deficiencies. Armed with this knowledge, there are several kinds of activities relating to this year's and next year's tree fruit disease control that growers can accomplish now. The following list of tasks can be used as a reminder for fruit growers who need to reduce losses caused by diseases.

- **Apple Scab.** Continue fungicide applications for late-maturing varieties. Cool, moist weather can favor establishment of the scab fungus on ripening fruit or for pinpoint scab to occur on fruit in storage. Later this fall, reduce the potential for high inoculum levels affecting next year's crop by mowing to chop up

the fallen leaves to hasten leaf decomposition. Growers ordering trees for fall planting to establish new blocks of apple trees will want to consider scab- immune varieties.

- **Apple Fire Blight.** Fire blight was not too severe this year, but where it was, record blighted trees while it can still be seen and be prepared to carefully prune out all cankers during the dormant season. Keep track of apple cultivars in which fire blight is worst. As new apple cultivars are considered for planting, avoid fire blight susceptible varieties and rootstocks such as M.26. Avoid interplanting apples and pears and consolidate susceptible varieties in new plantings for ease of chemical control application later on.
- **Cedar Apple Rust.** If rust has been a problem, plan on removing cedars so that they are not present anywhere near the orchard. Removal to a 1 to 2 thousand feet distance is desirable, but sometimes not practical.
- **Apple Powdery Mildew.** No controls needed now.
- **Apple Fruit Diseases.** Sooty blotch and flyspeck can be scrubbed off of infected apples with a bleach solution. However, this is laborious and will likely reduce the length of time treated fruits can be stored before sale. Carefully examine those areas of the orchard where sooty blotch and flyspeck or pre- harvest fruit decays are most serious. Determine whether the problem is caused by poor spray coverage (such as at row ends or by dense tree growth), by inoculum produced in dead limbs and branches, or by too much inoculum coming from wild sources nearby. Find ways to remedy these problems. Remove fruit mummies from the trees and orchard floor. Locate dead spurs, twigs and branches in the trees so that pruning and dormant spray applications are more effective later. Prepare a place to bury or burn next winter's prunings. Remove unwanted brush and woody growth around the orchard perimeter so that sources of sooty blotch, flyspeck and other fungal inoculum are reduced. This will also improve air movement and ventilation, thus creating an environment less favorable for disease.
- **Apple Collar Rot.** Wet periods during this past growing season may have revealed parts of the orchard where soil is poorly drained. Tile

poorly drained soils to reduce the threat of this disease. Carefully choose rootstocks for new plantings: MM 104, MM 106 and M.26 are susceptible. M.7 and M.2 are intermediate, and M.9 is resistant. When replanting, avoid using the same hole where a tree died. Applications of Ridomil Gold or phosphonite and phosphite fungicides such as Aliette can be made to the soil after harvest.

- **Stone Fruit Brown Rot.** Remove fruit mummies from the tree and the ground and destroy them.
- **Peach Leaf Curl.** Obtain Bravo, Ferbam, Ziram, or fixed copper fungicide needed for application this fall just after leaves have dropped. By covering all twigs and branches with this one spray, good disease control is assured and early bud break in the spring is not a problem. Plum pockets may also be controlled this way.
- **Peach root, crown, and collar rot.** Peach rootstocks are highly susceptible to Phytophthora root, crown, and collar rots. The main defense against these diseases is site selection and tiling to avoid wet soils. Ridomil Gold EC or phosphonate and phosphite fungicides such as Aliette may also be used if needed.
- **Stone Fruit Perennial Canker.** Do not prune cankers out of trees now; wait until spring.

For more information on tree fruit disease management, consult the Midwest Tree Fruit Handbook (ID-93) and the 2004 Commercial Tree Fruit Spray Guide (ID-92), available from County Extension Offices.

Watch for Woolly Apple Aphid

*Ric Bessin, Extension Entomologist
Department of Entomology*

When harvesting fruit this fall, growers should watch for insect pests that may have escaped detection during the season. One serious pest that can affect the health of the tree is the woolly apple aphid. This aphid is not usually controlled by the insecticides that are commonly used in commercial orchards, and in years following periodical cicada attack, they may be found infesting wounds on the trunks and branches.

The woolly apple aphid differs from other apple aphids in appearance, life cycle, and the type of damage inflicted. It is a sucking insect pest that weakens the tree by feeding on limbs and roots. It gets its name from the woolly appearance of its colonies which appear as a cottony mass generally clustered in wounds and pruning scars on the trunk and branches. The aphids themselves are purplish in color surrounded by white, cottony, thread-like secretions. Long strands of white wax are produced that help to protect the colony from predators and pesticide sprays.

Woolly apple aphid is a serious pest of apples, particularly young trees. Colonies form at wound sites on trunks, limbs, and twigs, where they feed on tender bark. Pruning and hail damage can create the wound sites for attack by this pest. Egg-laying wounds by the periodical cicada are ideal sites for infestation. As populations grow, aphids are commonly found on water sprouts in the center of the tree. The tree will begin to swell and form galls at the feeding sites.

As the number of aphids on the above ground portion of the tree increase, many work their way down to the roots and trunk below ground surface. It is the feeding on the roots that produces the greatest damage. Mature trees usually suffer little damage from the root infestations, but they are very damaging to young trees. Control of these aphids is very difficult when they attack the roots. Yellowish foliage is a sign that woolly apple aphid may be infesting roots. The root systems of nursery stock can be damaged, and severe root infestations can stunt or kill young trees. Infested trees often have short fibrous roots,

which predisposes them to being easily uprooted. Swollen galls also form on roots; galls increase in size from year to year and are sites where fungi can attack. Aphid feeding on the root systems also disrupts the nutrient balance of root tissue, which can affect growth of other parts of the tree. Trees can have above-ground infestations of woolly apple aphid but no root infestations.

Rootstocks vary in susceptibility to woolly apple aphid and susceptible rootstocks will form galls around the infestation sites. Use M111 or M106 if woolly apple aphid is a serious problem. Rootstocks appearing more susceptible to woolly apple aphid infestation include B9, M9, M26 and the P series.

During the summer, repeated generations of wingless aphids are produced. In the fall, winged individuals are produced which fly to search for elms on which to lay overwintering eggs, while some wingless forms may remain on both above and below ground parts of the apple tree throughout the winter.

Woolly apple aphid colonies produce honeydew, which results in development of black sooty mold. The wax and the honeydew are bothersome to pickers when it brushes off the tree and onto their clothing.

Monitoring

It is relatively easy to find where the colonies have formed. When monitoring for woolly apple aphid, examine four pruning scars on each of 5 scaffold limbs per tree. Carefully examine colonies to determine if live aphids are present. Predators, such as lady beetles, Syrphid fly larvae, and lacewing larvae can completely destroy the colony, but the waxy residue will remain. When examining colonies, blow hard on the branch to remove the waxy filaments to reveal live aphids. Treatments for woolly apple aphid are recommended when 10% of the pruning scars are infested with live colonies.

Control

There are few insecticides specifically labeled for control of woolly apple aphid. Thiodan is recommended for control of above-ground infestations. There are no insecticides to control root infestations on bearing apple trees.

Kentucky Vineyard Society Fall Meeting Oct 16, 2004

by Jim Wight, Vice President KVS

Where: Paroquet Springs Conference Center, Shepherdsville, KY

Directions:

Take I 65 to exit 117 Shepherdsville, KY (hwy. 44)
Go west on hwy 44 towards town and at the first stop light past I 65 turn left (at Taco Bell) onto Paroquet Springs Drive. The Paroquet Springs Conference Center is about 1/8 mile on the left. If you go past the YMCA you have gone too far.

Program:

All times are eastern time

9:00 - 9:45 a.m.	Registration - Coffee and pastries available.
9:45 - 10:00	Welcome
10:00 - 10:30	Calculating Small Pesticide Volume Applications - Joe Masabni, University of Kentucky
10:30 - 11:00	2004 Grape Grower Problems - John Strang, University of Kentucky
11:30 - noon	Nomination of officers.
12:00 - 1:00 p.m	Lunch (Bring a bottle of your favorite to share)
1:00 - 1:30	John H. Johnson Owner of The Wine Rack.
1:30 - 2:00	Robin Garr Publisher of the Wine lovers Web Page.
2:00 - 3:00	Elections: President, Vice President, Secretary, Treasurer & Directors
3:00 - 3:30	Short board meeting of newly elected officers.

Lunch Menu: Buffet - Potato Salad, Cole Slaw, Sliced Roast Beef, Ham & Turkey. Cheddar & Swiss Cheese. Selections of Breads & Rolls. Lettuce, Tomato, Pickle and Potato Chips. Coffee, Decaf. & Iced Tea

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Kentucky Vineyard Society Fall Meeting Oct 16, 2004

Name(s) _____
(For name badge)

Please make _____ reservations for lunch.

Total amount enclosed \$ _____

*** Please make check, payable to Kentucky Vineyard Society

PLEASE RSVP BY OCT, 11

Mail reservations to:
Jim Wight
340 Meyer Dr.
Shepherdsville, KY 40165

Receiving The Fruit Facts Newsletter Electronically on the Internet

Fruit Facts is available electronically on the web in the pdf format. To get notification of the monthly Fruit Facts posting automatically and approximately two weeks earlier than it would normally be received via mail, you can subscribe to the University of Kentucky Listserve.

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