

Kentucky Fruit Facts

March 2012/ (3/12)

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

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Fruit Crop News

By John Strang, U.K. Extension Horticulturist

The fruit crop still looks good. Fruit buds have been flashing through stages so rapidly this spring that it has been difficult to get sprays on. Floral stages are running 4 weeks ahead of normal (2008) and a week ahead of 2007. Weather for pollination has been just about ideal. If the weather continues to cooperate, harvest will be several weeks earlier than normal and considerably earlier than consumers expect it. A little extra advertising and promotion to alert consumers to this should pay off.

Western Kentucky apple growers should keep an eye out for wooly apple aphids that like to colonize the egg laying scars left over from last year's cicada outbreak. Most of the insecticides that we use for more common insects don't control these.



Check out the U.S. Apple web site at www.usapple.org. It contains a wealth of information on apple issues, trends, events, recipes, nutrition, and market news.

Blueberries are blooming and it is time to make the first application of nitrogen fertilizer. Where soil pH is high it is best to use ammonium sulfate which is very acidifying. In areas of the state where ammonium sulfate is not readily available, Southern States sells a fertilizer called Super Kicker, which is a 50/50 mixture of ammonium sulfate and urea that will work well. If the soil pH approaches 4.5 it is best to use urea as a source of nitrogen. A second application should be made 6 weeks after bloom. The publication, "Growing Blueberries in Kentucky (HO-60)" discusses rates to use.

Association update - Currently we have 122 members in the Kentucky State Horticultural Society and 167 members in the Kentucky Vegetable Growers' Association.

Upcoming Meetings

Apr. 13 Fruit Grower Orchard Meeting,
Boyd's Orchards, 1390 Pickard Pike, Versailles, KY.

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Terry and Susie Boyd operators and Black Diamond Blackberry Farm, Lexington, KY, Dr. John and Lucie Dvorak operators. (See program below.)

Apr. 16 Budding and Grafting Fruit Trees, Bullitt County Extension Office, 384 Halls Lane, Shepherdsville, KY. 6:00 p.m. ET. Contact Lorilee George 502-543-2257.

Apr. 21 Kentucky Nut Growers Association Spring Meeting, Marion County Extension Office, 415 Fairgrounds Rd., Lebanon, KY. 9:00 a.m. – 3:30 p.m. Contact Danny Ganno phone: 270-860-8362 or email: danganno@yahoo.com (See program below.)

May 10 Gardeners Toolbox – Tree Fruit Pest Control, Laurel County Extension Office, 200 County Extension Rd., London, KY. Contact Bonnie Sigmon phone: 606-864-4167.

May 17 KSHS Orchard Tour, Ayres Family Farm, 525 Wilson Lane, Owenton, KY. Contact John Strang 859-257-5685; email: jstrang@uky.edu

Jun. 3 Kentucky Vineyard Society Field Day, U.K. Horticultural Research Farm, 4321 Emmert Farm Rd., Lexington, KY. Contact Alicia McGuire phone: 502-777-8777; email: kvsdirector@gmail.com

July 22-25 Northern Nut Growers Association Annual Meeting, University of Kentucky, Lexington, KY and Kentucky State University Research Farm, Frankfort, KY. Contact John Strang 859-257-5685 or email: jstrang@uky.edu

Jan. 7-8, 2013 Kentucky Fruit and Vegetable Conference, Embassy Suites Hotel, Lexington, KY. Contact John Strang phone: 859-257-5685 or email: jstrang@uky.edu

Fruit Grower Orchard Meeting

Friday, April 13
Boyd Orchards
Owners, Terry & Susie Boyd
1390 Pickard Pike
Versailles, KY 40383
Home phone: 270-873-1853 / Mobile: 618-201-6305
Website: www.boydorchards.com/

Directions:

From Bluegrass Parkway (from Harrodsburg, Elizabethtown):
Take the first Versailles exit - Hwy. 33. At the top of the ramp, turn right. Take 169, Pinckard Pike left off

of Hwy. 33 and watch for Boyd Orchards on the left.
From Lexington:
Take U.S. 60 (Versailles Rd.) from Lexington. Turn left onto Shannon Run Road (Hwy 1967) at the light at the castle. Stay on Shannon Run Road until it “T’s” at Pickard Pike (169). Turn right and follow signs to Boyd Orchards on the right.

From Louisville/Frankfort:
Take I-64 to the Frankfort/Versailles exit, Hwy 60. Turn right and go approximately 10 miles to Versailles. Take 60 Business exit through town. Stay on that road as it becomes Main St. which eventually becomes Hwy. 33. At 169, exit left and follow the signs to Boyd Orchards on the left.

Program:

All times EDT
10:00 a.m. Registration & Tour of Boyd Orchards (apples, peaches & strawberries) & Farm Market
– Terry Boyd
11:00 Fungicide Resistance
– Nicole Ward
11:30 Alternative Sprays for Apple and Peach Management
- Ric Bessin
12:00 Lunch will be available at cost for those that preregister.

Preregister for lunch by calling Mary Ann Kelley at 270/365-7541 Ext. 216 between 8:00 a.m. and 4:30 p.m. CDT weekdays by Wednesday April 11 and give her a count for the Fruit Grower Meeting at Boyd Orchards.

1:00 p.m. Growth Regulators
– John Strang
1:30 Grower Round Table Discussion
– Jeremy Hinton, moderator
2:00 Leave for Black Diamond Blackberry Farm
2:30 Examine and Discuss Rotatable Cross Arm Blackberry Trellis
– John Dvorak

Kentucky Nut Growers Association Spring Meeting

Saturday, April 21
Marion County Extension Office
415 Fairgrounds Rd.
Lebanon, KY 40033
270-692-2421
Contact: Danny Ganno Phone: 270-860-8362

Directions:

From the South

Approaching on Highway 68/55 (Campbellsville HWY) enter Lebanon, proceed through downtown Lebanon. After you pass the Post Office (on the left), turn right at the next light on to Woodlawn Ave/Fairgrounds Rd. and proceed for 1/2 mile. We are located on the left.

From the East

Approaching on HWY 68 (From Danville/Perryville) enter Lebanon, turn left on Woodlawn Ave/Fairgrounds Rd (2nd light), proceed for 1/2 mile. The Extension Office is located on the left.

From the North

Entering via HWY 55 (From the Bluegrass Pkwy through Springfield), take HWY 55 into Lebanon. (Do not take the first #2154 at the light as this will take you West.) Immediately after passing the BP Station and the Masonic Temple turn left on HWY #2154 (going to 68 East). Take this to the stoplight (HWY 68 or Main St.). Turn right onto HWY 68, go to the next stop light and turn left onto Woodlawn Ave/Fairgrounds Rd. Go 1/2 mile to the Marion County Extension Office building (Brownish/red brick building with beige siding and cream colored trim) on the left.

- The luncheon will be potluck.
- Please bring nuts to taste, scion wood to exchange and items, such as plants and trees, which can be used as door prizes and for our auction.

Apple Tree Training

By Dwight Wolfe, U.K. Horticulture
Research Specialist

Apple limbs on trees trained to a high density system such as French Axe and the Tall Spindle systems are typically brought to below horizontal or pendant positions (unless removed using either a bench cut or a flush cut during pruning). Although there are a number of ways to achieve this objective, we have found one of the easiest methods is to use tree bands, also called “training bands”, “tab bands”, “tree-fix bands”, “quick bands”, among other names (Figure 1).

These bands can be purchased from a number of different suppliers (AM Leonard, <http://www.amleo.com>, and Midwest Vineyard Supply, <http://www.midwestvineyardsupply.com>, just to name two), and in various lengths (Figure 2).



Figure 1. Tree being trained to the tall spindle system using “tree-fix” bands.



Figure 2. “Tree-fix” bands in 6, 11, 16, and 30 cm lengths.

Further information on apple training systems can be found in page 25-37 of the Pennsylvania Tree Fruit Production Guide 2012-2013, which can be downloaded by going to: <http://agsci.psu.edu/tfpg>

As Apples in KY Bloom, Growers Should be Thinking About Fire Blight

By Nicole Ward, U.K. Extension Plant Pathologist

Primary infections occur through blossoms, so it is critical to manage the disease before and during bloom. It is too late to spray after bloom.

The disease is most prolific when conditions are warm and rainy at bloom.

All growers should be utilizing UK's Cougarblight predictive system. It is extremely easy to use, as growers should first click on http://www.wagwx.ca.uky.edu/plant_disease.html. Next, click "Fire Blight" on the left side of the screen. Choose the weather station that is closest to the orchard by clicking the arrow under "Station" in the center of the screen. There are a few options below, such as the history of fire blight in the orchard. Finally, click "Submit Choices." The next screen will describe the risk of infection in the orchard.

Fire blight control measures include antibacterial pesticides applied during bloom. Applications made after bloom are ineffective. When fire blight risk is high (warm temperatures combined with rain) during bloom or if fire blight was a problem last year, the following spray schedule should be followed:

1. Apply fixed copper at silver tip. Do not use copper fungicides after bud break.
2. Apply streptomycin beginning at pink stage, repeating every 4-5 days, through petal fall. At least 2 applications are required, but up to 4 sprays may be applied, depending on rain and temperature conditions. Pay extra attention to susceptible varieties (i.e. Gala, Jonathan, and Rome). Utilize Cougarblight or MARYBLIGHT predictive systems for assistance. Mycoshield (oxytetracycline) is also available for management of fire blight but is not as effective as streptomycin.

Refer to the Mid-west Tree Fruit Spray Guide ID-92 for spray recommendations or our UK Disease blog for more information on fire blight.

Alternative Control for Dogwood Borer in Apple Trees

By Ric Bessin, U.K. Extension Entomologist

Dogwood borer can be a common problem with apple trees grafted onto dwarfing rootstocks. These trees often develop above ground burr knots which are attractive for egg laying by dogwood borer moths. Dogwood borer larvae that begin feeding in the burr knot may move under the trunk bark reducing the health and vigor of infested trees. Infested areas often appear water soaked with frass packed into a portion of the wound. Recently two studies have discussed alternative practices to manage dogwood borer in commercial orchards.



Figure 3. A clearwing borer under the bark.

Dave Kain and Art Agnello reported in the Fruit Grower News (Dec 2011) that mating disruption trials using the Isomate LPTB (lesser peachtree borer) had reduced infestations with dogwood borer in apple burr knots. There is now an Isomate DWB formulated and labeled specifically for dogwood borer in apples and other orchard fruit trees. In their trial, 150 dispensers per acre were placed in late May. They were able to reduce infestations by as much as 50% in a season and expect that multiple years may be needed for more heavily infested orchards.

A separate study conducted in Michigan in the late 1990's by Larry Gut, Peter McGhee, and Ron Perry looked at soil mounding as a control tactic for dogwood borer. In their study, which was initiated after the end of the dogwood borer flight, soil was mounded to a height of 7 to 11 cm above the graft union of the young trees. After a year or so, soil settling resulted in soil levels dropping to around the graft union. Dissections of mounded and unmounded trees indicated a 76% reduction of infestation after one year and a 99% reduction after two years. They recommend that young trees be mounded in the first year while the soil is loose, inspected the second year to ensure the burr knots are covered, and again in the third year to see if the scion has begun rooting. If rooting has begun, removal of the soil to expose roots to air will prune these adventitious scion roots. This can be a valuable tool for commercial growers and homeowners using dwarfing rootstocks.

Thousand Cankers Disease in Walnut

By Nicole Ward, Paul Bachi, Julie Beale, and Brenda Kennedy, U.K. Plant Pathology

Thousand cankers disease (TCD) is a fatal disease of black walnut (*Juglans nigra*), and most recently, butternut (*Juglans cinerea*). The disease complex involves a fungus that is carried to trees by the walnut twig beetle, causing numerous cankers on branches and killing trees 5-6 years after infection. The disease complex is widespread in the western US, and has recently been identified in Tennessee, Pennsylvania, and Virginia. As of this printing (February 2012), thousand cankers disease has not been found in Kentucky.

Infected trees begin to show symptoms



Figure 4. Wilting black walnut in the last stages of thousand cankers disease.

Photo: Manfred Mielke, U.S. Forest Service, taken from USDA Forest Service "Pest Alert"

within 3 years after initial infection.

Early symptoms include branch flagging, wilting or yellowing of leaves, or canopy dieback from the top down (see figure 4). On branches, "thousands"

of small cankers (dime to quarter-sized) develop under bark. These cankers are not visible on the bark surface.

Cambium tissue dies as cankers expand to girdle branches. Rapid tree death ensues after initial infection. Tiny beetle exit holes and "galleries" can be found on dead wood.

Thousand cankers disease is an emerging pest that may cause severe losses in forests and landscapes in Kentucky and throughout the eastern US. Persons suspecting thousand cankers disease should submit suspect walnut samples to the UK Plant Disease Diagnostic Laboratory (PDDL) through local UK County Extension offices.

Below are recommended sampling protocols:

1. Collect branches as early in the season as possible, when fungal and beetle activity is highest.
2. Submit walnut samples to the PDDL as soon as possible after collecting, preferably within 24 hours. Do not store samples due to risk of sample deterioration.

3. Avoid collecting wet or damp samples. Wet wood shipped in plastic bags may become "moldy," resulting in difficult fungal isolations.

4. Collect samples only from live, symptomatic trees. Select symptomatic dying or recently dead wood, as beetles and fungi will be more prolific in this type of sample. Do not collect fallen limbs from the ground.

5. Branches should be 10" to 12" long and at least 1" in diameter.

6. Collect 6 to 10 branches from each tree. Do not remove bark.

7. When possible, mark the upward-facing side of each limb. Often beetles are found on the top side of branches.

8. Ship branch pieces in plastic bags with a dry paper towel inside to absorb moisture. Do not wrap branches in aluminum foil.

For more information on TCD, see NA-PR-02-10 from the National Forest Service, National Pest Alert, or the photo gallery at Forestry Images. If you suspect TCD, contact the Office of the State Entomologist or your local County Extension Office. This article is available as fact sheet PPFS-OR-W-15. Adapted from: University of Tennessee Thousand Cankers Disease Survey by J. Grant and M. Windham.

USDA Value Added Producer Grant

By Kara Keeton, Kentucky Agriculture Report
Feb. 27, 2012

The USDA VAPG is for producers and producer cooperatives adding value to their agricultural product. Eligible applicants include: Independent producers, farmer cooperatives, agricultural producer groups, and majority-controlled producer-based businesses. Grants may fund planning activities or working capital for marketing value-added agricultural products and for farm-based renewable energy. Planning grants can be used for feasibility studies, business plans, marketing plans and legal evaluations. Working capital grants can be used to purchase inventory or office equipment, pay salaries, utilities and office rent; pay legal or accounting costs; conduct marketing campaigns; or pay for branding and packaging material. The deadline for the USDA VAPG has not been announced yet, but it is a good idea to begin planning now. For more information go to www.growkentuckyag.com.

Tick Update and Outlook for 2012

By Lee Townsend, U.K. Extension Entomologist



Distribution of the black legged tick in the eastern and central US. (<http://geology.com/articles/ticks-lyme-disease/>)

Information on the blacklegged tick and its known distribution in Kentucky was covered in a previous KPN article (February 14, 2012). Since then, specimens have been received from Owsley and Wayne counties. It is likely that this species is present along deer trails in a band from McCreary County to Greenup County. Several adults have been found on people out in wooded areas this winter. It will be important to see if the smaller larva and nymphal stages of the species will try to feed on humans later this spring. Please send any ticks found this year to the UK Insect ID lab in Lexington. Samples can be submitted through your Cooperative Extension Office. The ticks will be identified but cannot be tested for diseases. Lyme disease is spread through the bite of infected nymphs (an immature stage) of the blacklegged tick in the northeastern, mid-Atlantic, and north-central states. While the blacklegged tick is present in the southeastern US (see map), it appears that nymphs have an altered feeding behavior (lizards and skinks) in the south so there are few, if any, encounters with humans. Consequently, there is low risk for Lyme disease. This is borne out by several studies on the incidence of Lyme disease that show focused areas in the north central and northeastern states. In those areas, blacklegged tick nymphs feed predominantly on small mammals and will bite humans.

Rural Energy for America Program

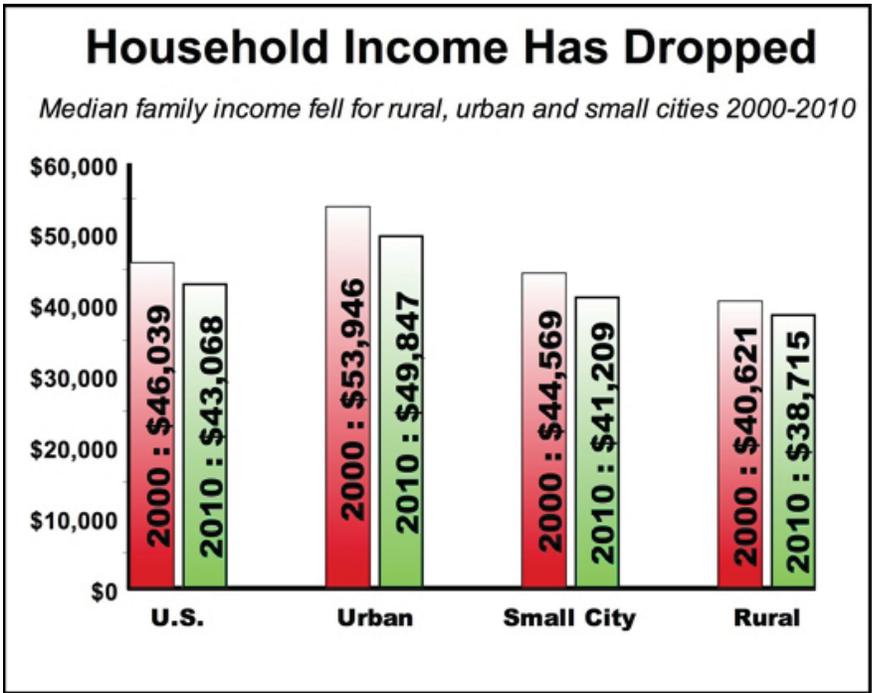
The Rural Energy for America Program (REAP) for the producer and small business programs is on March 30. If you are considering making improvements to enhance energy efficiency or would like to secure more of your operation's energy from renewable sources, this program may work well for you. One of the steps for filling out a Rural Energy for America Program application for energy efficiency improvements is an energy audit or assessment. Find a couple of resources for energy audits at the REAP page <http://www.growkentuckyag.com/programs/reap.html>

Kentucky and the Economic Recovery

By Alison Davis, U.K. Ag Economics Department, *Economic & Policy Update, March 26, 2012*

The 2008 recession appears to slowly be coming to an end. The stock market has recovered, the Dow Jones has consistently been closing above 13,000 and financial analysts forecast that this is a more sustainable increase than the one seen during the overvaluation of the housing market that caused the crash several years ago. The housing market has shown some signs of life even though there is still an excess supply of housing.

The question remains how Kentucky has fared and will continue to fare over the next few years. Kentucky tends to lag behind both national booms and busts. While our neighboring states were feeling the crunch the last 2-3 years, Kentuckians remained largely unscathed. Unfortunately, I predict that the 2013 fiscal year will be the toughest for Kentucky. While tax revenues have increased at the state level, it is still not enough to prevent cuts. Many have heard that the University of Kentucky, including Cooperative Extension and all state-funded colleges and universities will face a 6.4% state budget cut for the upcoming year. Other federal and state agencies face large cuts as well. So, Kentucky is not out of the woods yet.



Source: Dailyonder.com, 2/23/2012, Roberto Gallardo

A recent article was published that described how urban and rural areas responded during the recession. While incomes fell in both areas, they fell at a slower rate in rural areas than urban cities (see figure below). In addition, in 2011 60% of the rural counties had unemployment rates that were below the national average. However, rural Kentucky unemployment rates were below national rural unemployment rates. This is another indicator that Kentucky lags the trends a bit.

Kentuckians have turned to self-employment as an alternative or supplementary form of income. The table below suggests that while the number of proprietors increased in both rural and urban areas, the per-capita income per proprietor actually fell. The per capita income for proprietors was quite low in 2009, suggesting that many were starting businesses to supplement their earnings or to work part-time to earn some income. In addition, the total number of farm proprietors fell as well as per capita income. If

you are interested in more county-level data, visit <http://www.ca.uky.edu/cedik/countydataprofiles>.

Kentucky	% Change number proprietors 2005-2009
Metro	8.2%
Non-metro	2.6%
	Per Capita Income for proprietors, 2009
Metro	\$24,982
Non-metro	\$14,176

Source: Bureau of Economic Analysis, Regional economic accounts.

Receiving Fruit Facts Electronically on the Internet
Fruit Facts is available 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 UK College of Agriculture's Fruit Facts listserv.

New subscription requests and requests to unsubscribe should be addressed as follows.

To subscribe type "ListServer,l-s-v" in the To: line of your e-mail message.

Please enter a subject in the Subject: line -- the system needs for the Subject line not to be empty (blank).

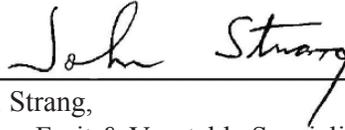
In the message body, enter the following two lines (nothing more!):

subscribe KY-FRUITFACTS

Or, to unsubscribe, the lines:

unsubscribe KY-FRUITFACTS

You should receive confirmation by return e-mail. If you have a problem, or if you wish to communicate with a person about "fruitfacts", the owner's address (the To: line of the message) is: owner-ky-fruitfacts@lsv.uky.edu



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