

Kentucky Fruit Facts

January-March 2011/ (1-3/2011)

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

John Strang, Extension Fruit Specialist, Editor
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Fruit Crop News

By John Strang, U.K. Extension Horticulturist

Fruit crop bloom development has been moving along fairly rapidly, as a result of recent warm temperatures. In Lexington Asian and European pears are blooming; peaches range from pink to bloom; and apples are beginning to bloom. At the Princeton UKREC peaches are and apples are blooming. In Jackson, peaches are setting fruit and apples are at petal fall. It is time to set pheromone traps in apple and peach orchards for Oriental fruit moth and codling moth to determine the need for and the timing of insecticide treatments. Spray programs should be in high gear as rainfall has been prevalent across the state and these early sprays are some of the most important sprays of the season.

The good news is that the 2010 Dietary Guidelines for Americans published jointly by the USDA and Department of Health and Human Services focus on evidence-based nutritional guidance to promote health. The intent is to reduce the risk of chronic disease and reduce the prevalence of overweight and obesity through improved nutrition and physical activity. One



of the key recommendations is to, “Make half your plate fruits and vegetables.” These recommendations pertain to all ages and calorie intake requirements. They also encourage the consumption of a variety of fruits and vegetables, particularly dark green, red and orange vegetables. The Healthy Hunger-Free Kids Act calls for doubling fruit and vegetable consumption in school meal programs and includes increased federal funding for this.

Association update - Currently we have 114 members of the Kentucky State Horticultural Society and 142 members of the Kentucky Vegetable Growers’ Association.

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Upcoming Meetings

Apr. 11 Blueberry Production and Pruning, UK Robinson Center for Appalachian Resource Sustainability, 2011 Mountain Monday Series, RC Auditorium, Quicksand, KY. Presentation by Dr. Shawn Wright, 6:30 p.m. Contact Jackie 606-666-2428 X 285; Website: <https://www2.ca.uky.edu/rcars/>

Apr. 14 Fruit Grower Orchard Meeting, Jackson’s Orchard, Bowling Green., KY 10:00 a.m. CDT. See program below. Contact John Strang Phone: 859-257-5685; email: jstrang@uky.edu

Apr. 19 Home Apple Production, Kenton County Extension Office, 6:00-8:00 p.m., contact Andrea Dee, Phone: 859-356-3155; email: andrea.dee@uky.edu

Apr. 23 Kentucky Nut Growers' Association Spring Meeting, Hardin County Extension Office, Elizabethtown, KY, 9:30 a.m. EDT. See article and directions below.

May 19 Kentucky State Horticultural Society Orchard Meeting, Reid's Orchard, Owensboro, KY

Jun. 13. Food Preservation, UK Robinson Center for Appalachian Resource Sustainability, 2011 Mountain Monday Series, RC Auditorium, Quicksand, KY. Presentation by Martha Yount, 6:30 p.m. Contact Jackie 606-666-2428 X 285; Website: <https://www2.ca.uky.edu/rcars/>

Jun. 19 Kentucky Vineyard Society Summer Field Day, Horticulture Research Farm, Lexington, KY Contact Patsy Wilson Phone: 859-257-1332; email: patsy.wilson@uky.edu

Sept. 9-10 Pawpaw: Its Past, Present and Future, 3rd International Pawpaw Conference, Frankfort, KY. The Conference will be limited to 180 attendees. Registration \$175 per person, pre-registration deadline is August 1, 2011. The Conference will be sponsored by the Kentucky State University Land Grant Program, the Ohio Pawpaw Growers Association and the PawPaw Foundation. The Conference will feature "Pawpaws Around the World" (a discussion of national and international pawpaw variety trials), pawpaw processing and marketing advances, as well as talks and poster sessions about pawpaw research, extension, and entrepreneurial activities. The Conference will include a "Pawpaw Culinary Extravaganza" featuring pawpaw menu items from chefs, as well as other unique Kentucky cuisine. This Conference will be a unique experience for scientists, nurserymen, entrepreneurs, and enthusiasts to share information about the production and uses of pawpaw.

In addition to presentations on pawpaw, the Conference will also offer an opportunity to taste pawpaw fruit and tour the Kentucky State University pawpaw orchards. The Conference will have a number of invited speakers; however, there will also be a poster session and show-and-tell session about pawpaw for participants

For registration information and conference updates see the website: <http://www.pawpaw.kysu.edu/3rdinternationalpawpawconference.htm> or

write Dr. Kirk Pomper, Kentucky State University, 129 Atwood Research Facility, Frankfort, KY 40601, or call 502-597-6174.

Jan. 5-6, 2012 Kentucky Fruit and Vegetable Conference, Embassy Suites Hotel, 1801 Newtown Pike, Lexington, KY. Contact John Strang, 859-257-5685 office; 859-396-9311 mobile; email: jstrang@uky.edu OR Tim Coolong 859-257-3374 office; or 859-421-5973 mobile; email: tcool2@uky.edu.

Fruit Grower Orchard Meeting

Thursday, April 14

Jacksons Orchard

1280 Slim Island Rd., Bowling Green, KY 42101

Phone: 270-781-5303

Website: <http://www.jacksonsorchar.com/>

Directions:

Proceed south on I-65 to the first Bowling Green exit, exit 28 (at the Corvette museum). Exit to the right and drive towards the downtown area (mostly on 31W). At the 4th stop light turn right on to 6th street. Proceed under the RR (1 block) to the 1st stop light and turn right on to Rt. 185. Follow Rt. 185 for about 3 miles across the river. Roughly 200 yards after crossing the river will be a Jackson's Orchard sign. Turn left and follow the signs to the orchard

Program:

All times CDT

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| 10:00 a.m. | Registration & Tour of Jackson's Orchard & Farm Market – Bill Jackson |
| 11:00 | Early Season Fruit Diseases and Mesonet Applications - John Hartman |
| 11:30 | Early Season Insect Management, Thiodan Phase-out and Organophosphate Free Orchards - Ric Bessin |
| 12:00 | Lunch will be available at cost for those that preregister. |

Preregister for lunch by calling Pam Compton at 859/257-2909 between 9:00 a.m. and 4:00 p.m. EDT weekdays by Tuesday April 13 and give her a count for the Fruit Grower Meeting at Jackson's Orchard.

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| 1:00 p.m. | Fruit Thinning – John Strang |
| 1:30 | Brown Marmorated Stink Bug – Ric Bessin |
| 1:45 | Fruit Tree Grafting – John Strang |
| 2:00 | Apple Grower Round Table Discussion - Larry Ayres, moderator |

Kentucky Nut Growers Association Spring Meeting

Saturday, April 23

Hardin County Extension Office

Elizabethtown, KY

Contact: Carl Ray Phone: 270-281-4800

Directions:

From the East - The Extension Office is located on the right just off U.S. 62 about two miles west from downtown Elizabethtown off of Peterson Drive – directly behind the Cecilia Auto Sales Lot.

From the West - In approaching Elizabethtown from western Kentucky on U.S. 62, turn left onto Peterson Drive, at the Cecilia Auto Sales Lot. KNGA signs will be posted.

The luncheon will be potluck. Dr. Ric Bessin, U.K. Extension Entomologist will give a presentation on stinkbugs in Kentucky. 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 an auction

Kentucky Horticulture Outlook

*By Dr. Tim Woods, U.K. Extension
Agricultural Economist*

2010 Review: Just ten years ago, when Kentucky was starting to make a concerted push toward diversification and development of the horticulture industry, the value of all horticulture cash receipts was \$78.6 million, with floriculture, nursery, greenhouse, and sod contributing \$59.7 million and produce contributing \$18.9 million. Kentucky's produce (vegetables/fruit) industry has seen steady growth over this period, even through a difficult economy. The green (nursery/greenhouse) industry has been negatively impacted during the slow recovery. Current industry sales trends point toward 2010 gross sales winding up somewhere around \$115-\$120 million, about the same as in 2009.

Produce Industry: Gross produce receipts appear to be about equal to where they were in 2009 as more producers benefited from additional direct market channels, especially farmers' markets and auction sales. Weather was the main limiting factor from realizing record produce sales. Producer numbers and acreage

has continued to expand. The dry late summer slowed yields and size for some items after a very strong spring. Direct markets remain an important channel for most of our producers. Over 2,300 vendors sold in farmers' markets in 2010 and the number increases each year. Auction and other wholesale channels have experienced significant growth in producer numbers, with the sustained interest in local produce in Kentucky markets.

Preliminary planting intentions for 2010 indicated an expected acreage increase for produce crops of 4% overall to a total of around 13,000 acres. Fruit crop acreage was projected to be up slightly at an estimated 3,000 acres and vegetable crop acres estimated at 10,000. Kentucky had around 10,500 acres in all produce in 2002. While Kentucky remains a relatively minor produce supplier compared to surrounding states, the sales growth in Kentucky has outpaced that of surrounding states, especially for fruit.

Green Industry: The green industry nationwide is driven by new home construction and healthy consumer spending, which have been in a deep and extended slow down for the past 2 years. Greenhouses, sod operations, landscapers and mid-size nursery businesses grew rapidly between 2002 and 2006, but have each been in difficult times since. A continued weak overall economy and relatively high input costs, especially labor, resulted in another weak marketing season for Kentucky's green industry. Demand has remained subdued for most green products, particularly trees, shrubs and sod.

2011 Outlook: Direct market, auction and independent grower-shipper wholesale sales will likely increase again this year. Two new produce auctions started in 2010 and another is planning to open in 2011. A number of important issues however, will shape commercial fruit and vegetable production in Kentucky. A recent survey of the southeast horticulture Extension specialists pointed to labor management and food safety standards and compliance as the top issues influencing production. These will remain the key industry drivers during the next few years. Gross sales will continue to be driven by higher-value direct marketing at farmers' markets, directly off the farm, and direct to foodservice. Wholesale opportunities will continue to expand as demand for local products remains strong in local markets. Overall produce acreage will continue to move higher and higher-value market channels should see sales increasing over the next few years.

Producer expectations for the next three years were surveyed in the 2010 planting intentions and marketing survey. Many growers expect to stay about the same, but the number increasing substantially outpaced the number expecting to decrease, even more so than when growers were surveyed in 2008. This was pretty much the case in every market channel. The green industry should see a modest rebound in 2011 as the economy moves toward recovery. Floriculture and service-oriented enterprises should see an earlier response to the recovery followed by nursery and sod. Gross sales for 2011 for all of Kentucky horticulture could approach the record high observed in 2008 of \$118 million.

Periodical Cicada Brood XIX is due in 2011

By Lee Townsend, U.K. Extension Entomologist

The 13-year Periodical cicada Brood XIX will emerge mostly in west Kentucky in the Pennyrite and Green River areas from late April to late May. There is a fact sheet on periodical cicadas in KY posted at <http://www.ca.uky.edu/entomology/entfacts/ef446.asp> A web page for it is up at <http://pest.ca.uky.edu/EXT/Cicada/kycic2011.html>

New NC-140 Apple Rootstock Trial

By Dwight Wolfe, Horticulture Research Specialist

A new NC-140 Apple rootstock trial was planted March 18, 2010, at the UKREC orchard in Princeton, KY. The trial consists of 31 different rootstocks with Aztec Fuji as the scion cultivar. Rootstocks include a series of Budakovski rootstocks from Russia, (B.7-20-21, B.9, B.10, B.64-194, B.67-5-32, B.70-20-20, B.70-68, B.71-7-22, B.73-150), and a number of rootstocks from the Cornell-Geneva program in New York state, (G.11, G.202N, G.202TC, G.2034, G.3001, G.4003, G.4004, G.4013, G.41N, G.41TC, G.4214, G.4814, G.5087, G.5202, G.935N, G.935TC). Also included are M.26 EMLA, M.9 Pajam2, M.9 NAKBT337, and three German rootstocks, PiAu.5111, PiAu.990, and Supp.3. Growers can see and learn more about these rootstocks and much more at the University of Kentucky's College of Agriculture 2011 All Commodity Field Day on July 21, at the Research and Education Center in Princeton, Kentucky.

Recognizing Brown Marmorated Stink Bug Damage

By Ric Bessin, U.K. Extension Entomologist

As the weather continues to warm insects will become active soon, if they are not already active.

One insect that we will be watching for carefully is the brown marmorated stink bug (BMSB) that was first confirmed in Kentucky this past fall. This new invasive insect pest may be one of the more serious insect



Figure 1. Brown marmorated stink bug

pests in Kentucky in the coming years as it has a very wide host range attacking many field and horticultural crops as well as ornamental plants and is home invader in the winter months. This article describes the type of damage and when it is likely to occur on different field and horticultural crops. While the most serious damage is usually to the fruiting parts of plants, they may also feed on leaves and stems of some hosts. As this pest is new to our state, my comments have been gleaned from conversations with or reports from others that have battled this pest in the mid Atlantic states. Reports from those areas indicate that this insect becomes active in the field sometime in mid to late April.

Brown marmorated stink bug has been identified in several Kentucky counties. It has been confirmed in Jefferson, Fayette, Boyd, Carter, Rowan, Lawrence, and Greenup counties and also reported in Breckinridge, Grayson, Henry, Carroll, and Lewis counties. We have not seen specimens nor been able to confirm the reports from the last five counties listed. This pest is a very capable hitchhiker and has the ability to rapidly move to new areas. If you suspect BMSB from a county that has not yet been confirmed to have it, bring a sample specimen to your county extension office.

Damage to field crops has been serious in soybeans and field corn in the mid Atlantic states. In both of these crops BMSB feeds on the fruiting part of the plants, the developing soybean pod or the corn ear. Pod feeding will result in discolored and shriveled beans similar to that caused by other stink bugs to soybeans. In field corn they will feed through the husk with their piercing sucking mouthparts causing

shriveled kernels. BMSB that are crushed during the chopping of silage and fed to dairy cattle may cause an off flavor in milk (a cilantro-like flavor). In vegetable crops, BMSB will cause damage to tomato and pepper fruit similar to that of the brown stink bugs. They feed on developing fruit with the piercing sucking mouthparts causing hard corky areas under the skin of the fruit that does not color properly. Damage to sweet corn is similar to that described for field corn, except that damaged kernels will discolor when cooked. With green beans, they attack the flowers and pods resulting in deformed pods and shriveled and/or missing seeds. With squash and pumpkins they are reported to attack the fruit and even kill plants.

In fruit crops, particularly apples, pears, peaches and nectarines, BMSB is reported to begin attacking developing fruit very early in the season and continue through harvest. For this reason, growers are advised to monitor for BMSB weekly from fruit set until harvest. Damage to tree fruits will result in sunken areas on the fruit surface and discolored darkened, corky areas under the skin of the fruit. These depressions appear to be up to 3/8 inch or so in size. These damaged spots can easily be mistaken for cork spot on apples. They will also feed on blueberries, brambles, and strawberries, but I haven't seen reports on the types of damage. Damage by our brown stink bugs in brambles can result in undersized drupelets and drupelets that don't color properly. In grapes they will attack the berry and can also act as a contaminant causing an off flavor in wine if the bugs are crushed with the berries. It has been

Peach Brown Rot Control Begins at Bloom

By John Hartman, U.K. Extension Plant Pathologist



Figure 2. Peach brown rot showing fuzzy gray fungal sporulation on the brown, decayed portions of the fruit.

Peaches are in bloom statewide (Figure 1). New shoots and flowers are susceptible to the brown rot fungus (*Monilinia* sp.) and the fungus infects these plant parts during cool, moist spring weather. Once colonized by the fungus, the flowers and shoots provide spores that can infect the developing fruit. The 2011 Midwest Tree Fruit Spray Guide, available at County Extension Offices statewide, suggests using a fungicide for brown rot disease control at pink bud, full bloom, and at petal fall. Preventing these primary infections now will be very helpful in preventing fruit brown rot disease (Figure 2) later. The Spray Guide lists 16 different fungicides that are useful for brown rot disease management, so growers have many

choices. Use of fungicides is most effective if growers have completed winter orchard sanitation efforts such as removing fruit mummies and pruning out diseased branches.



Figure 1. Kentucky peach trees in bloom.

Sign-up for SURE Opened January 10, 2011

*From Kentucky Agriculture Rpt., Keeton
Communications, Dec. 27, 2010*

USDA Farm Service Agency State Executive Director John W. McCauley announced the sign-up period for the 2009 crop year Supplemental Revenue Assistance Payments (SURE) program began on Jan. 10, 2011. SURE is one of five disaster programs USDA Farm Service Agency offers that provides assistance to farmers and ranchers who have suffered losses due to natural disasters.

To be eligible for SURE a farm must have at least a 10 percent production loss on a crop of economic significance. The farm must also have a policy or plan of insurance under the Federal Crop Insurance Act or the Noninsured Crop Disaster Assistance Program (NAP) for all economically significant crops.

The farm has to be physically located in a county that was declared a primary disaster county or contiguous county by the Agriculture Secretary under a Secretarial Disaster Designation. Without a Secretarial Disaster Designation, individual producers may be eligible if the actual production on the farm is less than 50 percent of the normal production on the farm due to a natural disaster.

Producers considered socially disadvantaged, a beginning farmer or rancher, or a limited resource farmer may be eligible for SURE without a policy or plan of insurance or NAP coverage.

For more information on the 2009 SURE program, visit any FSA county office or <http://www.fsa.usda.gov/sure>.



John G. Strang,
Extension Fruit & Vegetable Specialist