



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

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A newsletter for commercial growers of fruit and vegetable crops

"We are what we repeatedly do. Excellence, then, is not an act, but a habit." Aristotle

Address any questions or comments regarding this newsletter to the individual authors listed after each article or to its editor, Rick Weinzierl, 217-244-2126, weinzier@illinois.edu. The *Illinois Fruit and Vegetable News* is available on the web at: <http://ipm.illinois.edu/ifvn/>. To receive email notification of new postings of this newsletter, call or write Rick Weinzierl at the number or email address above.

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Upcoming Programs

For commercial fruit and vegetable growers ...

- **Illiana Vegetable Growers School, January 5, 2012**, at Teibel's Restaurant, 1175 US 41, US 30 & US 41, Schererville, Indiana. For schedule and registration form, click [here](#) or contact Liz Maynard at emaynard@purdue.edu or 219-531-4200, ext. 4206.
- **Illinois Specialty Crops, Agritourism, and Organic Conference, January 11-13, 2012**, at the Crowne Plaza Hotel in Springfield, IL. To register, visit <http://www.specialtygrowers.org/iscaoc-conference.html> or contact Charlene Blary at 309-557-2107 or Cblary@ilfb.org.
- **Illinois Grape Growers and Vintners Association Annual Conference, February 2-4, 2012**, at the Crowne Plaza Hotel and Conference Center, Springfield, IL. See <http://www.illinoiswine.com/conference.html>, or contact Megan Presnall at 217-726-8518 or megan@illinoiswine.com.
- **Southern Illinois Commercial Tree Fruit School, February 7, 2012**, at the Mt. Vernon Holiday Inn, Mt. Vernon, IL. For more information, contact Elizabeth Wahle, wahle@iilinois.edu, 618-650-7050.
- **Southwestern Illinois Commercial Tree Fruit School, February 8, 2012**, at the Knights of Columbus Hall, 3 miles south of Hardin on the Illinois River Road. For more information, contact Elizabeth Wahle, wahle@iilinois.edu, 618-650-7050, or Rhonda Ferree, ferreer@illinois.edu, (309) 543-3308.
- **Western Illinois Vegetable Growers School, February 13, 2012**, at the Adams County University of Illinois Extension Office, Quincy, IL. For more information, contact Mike Roegge, roeggem@illinois.edu, 217-223-8380.
- **Kankakee Area Vegetable School, February 15, 2012**, at the Kankakee County University of Illinois Extension Office, Kankakee, IL. For more information, contact James Theuri, jtheu50@illinois.edu, 815-993-8337.
- **Southern Illinois Commercial Vegetable School, February 16, 2012**, at the Mt. Vernon Holiday Inn, Mt. Vernon, IL. For more information, contact Elizabeth Wahle, wahle@iilinois.edu, 618-650-7050.

- **Illinois-Wisconsin Fruit and Vegetable Growers Conference, February 20, 2012.** Details to come. For advance information, contact Maurice Ogutu at Ogutu@illinois.edu, 815-235-4125.
- **Illinois Small Fruit and Strawberry Schools, March 6-7, 2012,** at the Mt. Vernon Holiday Inn, Mt. Vernon, IL. Details to come.

Notes from Chris Doll

For once, no major weather conditions for this time of the year. The last apples in the Back 40 were picked on November 30, and anything that was left finally froze on the December 10 with an 18-degree morning. Previously, the minimum was 26 degrees, enough to allow mulching of strawberries. Locally, rainfall has been sufficient, but not excessive, and field work can continue. There have been several reports for shredding apple leaves to reduce apple scab carryover, and it is much more effective when they are dry or even frozen. Fortunately this disease has not been severe for my local growers. Conditions also favor baiting for voles where the populations call for it.

I made an enjoyable trip to the Michigan EXPO last week with a van load of fellow Illini. It was quite a show, with over 350 exhibitors. The distraction of the exhibits kept me away from many of the presentations on fruit, but I understand that most will be available electronically. Quite a few posters on Michigan research were posted, and they too were bypassed except for one that reported on using hogs to clean up residual fruits in apple orchards. The results were favorable in that all the fruit was eliminated, no tree damage was seen, and there was some reduction in plum curculio infestation in the succeeding crop year. It reminded me of the home orchard some 70 years ago, and though we never studied the reduction of insects, we did note that we had no vole damage in those days.

The fellowship and interchange of information that happened on that trip can be repeated again for those attending the Illinois Specialty Crops, Agritourism, and Organic Conference in Springfield January 11-13, 2012. One of the guest speakers there will be Dr. Steve McCartney from North Carolina. He made a couple of good presentations in Michigan, and I'm sure will do the same for us. And local grower Jerry Mills should entertain everyone in with memories of learning fruit growing and doing things the easy way. Day-long workshops on "scaling up local food systems," "getting started for new growers," "expanding markets," and "legal issues" will be held on Wednesday, January 11. I look forward to seeing many friends there and enjoying a taste of the good Illinois ciders.

Chris Doll

Local Foods Issues

The Frontera Farmer Foundation is now accepting grant applications for 2012. The Frontera Farmer Foundation is committed to promoting small, sustainable Midwestern farms serving the Chicago area, by providing them with capital development grants. The Frontera Farmer Foundation will award grants for capital improvements of up to \$12,000 to small and medium-sized, individually owned farms that sell their food products to customers in the Chicago area at farmers markets and otherwise. Farmers must have been in business for at least three years and must demonstrate how the grant will improve both their farm's viability and the availability of locally grown food products in the Chicago area. Grant applicants will be judged on the basis of demonstrated need, long-term dedication to sustainable farming, creative business acumen, and commitment to sustainability.

Applications are available at http://www.rickbayless.com/pdf/FFF2012_application.pdf and from Jeff Maimon at Frontera Grill (312-334-3661). Grant applications can be submitted by mail (Frontera Farmer Foundation, 445 N. Clark, Chicago, IL), email (jmaimon@fronteragrill.net), or fax (312-661-1830). All applications must be received by **February 28, 2012**. Recipients of grants will be notified on or before **March 31, 2012**.

Southern Illinois Farm Beginnings

Applications are being accepted for the 2012-2013 Southern Illinois Farm Beginnings course offered by Food Works Information and applications are available at <http://eatsouthernillinois.org> and from Dayna Conner at dayna@eatsouthernillinois.org or 618-319-0542. The farm beginnings program is for aspiring new growers and those who have operated a small farm for 9 years or less and desire to become more financially and environmentally sustainable.

Fruit Production and Pest Management

Census of Illinois Grape Growers and Wine Makers

The Illinois Field Office of USDA's National Agricultural Statistics Service (NASS) is working in cooperation with the Illinois Grape Growers and Vintners Association (IGGVA) to conduct a statewide census of grape growers and wine makers. The objective of this project is to assess the current size and scope of Illinois' grape and wine industry. The census will provide information on what varieties are planted in each region of the state and information on yield and quality.

This census is intended to provide individual grape growers and wine makers the information they need to develop improved production and marketing plans, as well as, identify problem areas for the industry and its members. In addition, this report will provide a greater understanding of the industry to legislators and other executive decision makers. Data collection for this project will begin in early January 2012 and will continue through the end of March. The summary publication is expected to be available in early June of 2012 and will be sent to all respondents who request a copy. It will also be available online for download at http://www.nass.usda.gov/Statistics_by_State/Illinois/index.asp.

Funding for this project came from the USDA's Specialty Crop Block Grant Program. A similar study was conducted in 2007 by the IGGVA with the assistance of the University of Illinois at Urbana-Champaign. The results of that study can be found at: <http://www.illinoiswine.com/pdf/industry-report07.pdf>

All questions relating to this project should be directed to:

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Berry Maturation in Grapes

One of the key components for success for wine grape producers in Illinois is delivering high quality fruit to the buyer. The buyer is usually a winemaker who depends on having high quality fruit to make high quality wine. Considering all the challenges to producing grapes in a natural setting, understanding how grape berries develop their maturity may seem like a small issue ... but it isn't.

Different varieties of grapes have different potentials for making wine. This potential is linked to the genes that make that variety unique. Different vineyards have different potentials for producing fruit. This is terroir, or a "sense of place." Grape vines have a tremendous ability to adapt and respond to conditions, including the soils their roots grow in, the aspect of their growing site, the length of the typical growing season at that site, the weather of a given season, and many other "site" factors. Once a vineyard is established, these factors are largely fixed.

But grapes also respond to another major factor in determining winemaking quality – management. Growers have a tremendous influence on the potential for quality in a crop of wine grapes. This is the challenge for growers ... to carry out management in such a way as to reach the highest potential for quality and yield, while controlling cost to ensure profit. This is no small challenge, but it is a critical challenge for a wine grape industry. Growers need to reward wineries and, in kind, wineries need to reward growers. In the end, the wine product must have value that rewards consumers, who must be willing to spend their hard-earned money on the wine. That is what is needed to build an industry.

For growers to manage their wine crop and produce high quality fruit takes knowledge and discipline. It demands a comprehensive understanding of the grapevine, how it interacts with its environment and responds to the management the grower exerts on the vineyard. Consider the critical role of ripening, the exacting timing of harvest needed to ensure the best quality for the winemaking. What practices will the grower use to influence fruit ripening quality and

timing? Most Illinois growers are familiar with the practices of canopy management. What happens when the timing of these practices is altered? How does crop load adjustment and vine balance influence the timing and potential of quality in fruit? To understand these critical factors takes time, but focus as well. Here's a great website to learn a little more about ripening in grapes; <http://www.extension.org/pages/31096/stages-of-grape-berry-development> .

Grape growers in Illinois will have a great opportunity to learn more about vine management and its influence on quality at the next annual conference of the Illinois Grape Growers and Vintners Association, February 2-4, 2012, in Springfield, IL. A special guest from Texas A&M Agrilife Extension, Fritz Westover, will join us. Fritz's experience with grapes in Texas and Virginia will help him shed light on the ways to succeed in growing grapes for wine. This should be a great opportunity to take big steps forward in understanding how to succeed as a grower of quality wine grapes. You can learn more about the IGGVA conference at their website, <http://www.illinoiswine.com> .

Bill Shoemaker, (630-584-7254; wshoemak@illinois.edu)

Vegetable Production and Pest Management

Bacterial Spot of Pumpkin

In the past five years, bacterial spot (*Xanthomonas cucurbitae*) has become a serious disease of pumpkins in Illinois and other Midwestern states, causing greater than 50% fruit rot in some fields. In 2011, we conducted a survey in Illinois to assess the incidence and severity of bacterial spot in commercial pumpkin fields. A total of 65 fields, including 54 jack-o-lantern and 11 processing pumpkin fields were surveyed. In each field, 60 pumpkin fruits were examined for symptoms of bacterial spot disease. Fruit infection with *X. cucurbitae* was observed in 57 of 65 fields surveyed (88%). Overall, 1,523 of 3,900 (24%) of fruits examined had bacterial spot symptoms. In 2011, 18% of the fields had greater than 50% of the fruits showing bacterial spot symptoms. *X. cucurbitae* was isolated from almost all infected fruits.

Symptoms of bacterial spot develop on leaves and fruit. Small, dark lesions develop on leaves (Fig. 1), which may coalesce to form larger necrotic areas. The most readily identifiable symptoms occur on fruit. Initial lesions are small, slightly sunken, circular spots, with a beige center and a dark-brown halo (Fig. 2). On mature fruit, saprophytic fungi often colonize the dead, tan tissue at the center of the lesion, resulting in rapidly collapsing fruit. *X. cucurbitae* cultures are yellow (Fig. 3). Accurate identification of *X. cucurbitae* from other bacteria requires molecular methods.



Figure 1. Bacterial spot on pumpkin leaves.



Figure 2. Fruit infected by *Xanthomonas cucurbitae*.



Figure 3. Cultures of *Xanthomonas cucurbitae*.

X. cucurbitae infects pumpkins and other cucurbit crops, especially squashes. Very little is known about the biology of *X. cucurbitae* and etiology of the bacterial spot. Currently, we are investigating etiology, epidemiology, and management of this disease. The available methods for management of this disease include planting pathogen-free seed, at least two-year rotation of cucurbit with noncucurbit crops, and spray-application of copper compounds during early formation and expansion of fruit. Copper spray is ineffective once an epidemic is underway.

Less seriously ...

Some Adult Truths (OK, mostly older adult truths ... and some may or may not be true)

Nothing sucks more than that moment during an argument when you realize you're wrong.

I totally take back all those times I didn't want to nap when I was younger.

There is great need for a sarcasm font.

Obituaries would be a lot more interesting if they told you how the person died.

I keep some people's phone numbers in my phone just so I know not to answer when they call.

I sometimes have a hard time deciphering the fine line between boredom and hunger.

I love the sense of camaraderie when an entire line of cars team up to prevent a jerk from cutting in at the front. Stay strong, brothers and sisters!

Sometimes I'll look down at my watch 3 consecutive times and still not know what time it is.

The first testicular guard, the "cup," was used in hockey in 1874 and the first helmet was used in 1974. That means it only took 100 years for men to realize that their brains are also important.

University of Illinois Extension Educators and Specialists in Fruit and Vegetable Production and Pest Management

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