

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, 217-333-6651, weinzier@uiuc.edu. The *Illinois Fruit and Vegetable News* is available on the web at: http://www.ipm.uiuc.edu/ifvn/index.html. To receive email notification of new postings of this newsletter, call or write Rick Weinzierl at the number or address above.

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University of Illinois Extension Specialists in Fruit & Vegetable Production & Pest Management

Crop and Regional Reports

In the south and southwest, continuous rainfall slowed field operations at the beginning of the month, but clear skies through the 10th have allowed fields to be accessible again. Many retail markets are in their final weeks of operation, while apple growers continue sales on the wholesale market. In addition to horseradish harvest getting underway, the last of the corn and soybeans are being harvested.

Time is getting close for mulching strawberry plants in order to prevent winter injury to the crowns and root system. Although snow cover is the best protection, sufficient snow coverage (6-8 inches) is not dependable throughout the winter months in Illinois, so mulches are used to keep winter injury to a minimum. The best mulching materials include weed-free straw from cereal grains (wheat, rye, or barley) or pine needles. Hays should be avoided because they contain the seed heads and other weed seeds that, once germinated, could become a serious weed problem the following spring. Oat straw, though useable, is generally not recommended because it more readily compacts and may smother the strawberry plants.

Timing of mulch application is critical. Strawberry leaves are still active well into late autumn, and applying mulch too early in the fall can reduce the plant's ability to produce and store reserves needed for winter survival. If the mulch is applied too soon, before plants are dormant, the mulch can cause rotting of the leaves and crowns. If mulch is delayed too late, low temperatures could damage crowns. The best time to apply mulch is after the strawberry plants have experienced several light frosts, but before temperatures drop to 20° F, at which point injury can occur. After several light frosts, the leaves attached to the crown should begin to flatten out, signaling the time to mulch. In Illinois, this is usually late-November to mid-December. At least 2 inches (settled) of mulch should be applied over the entire planting, and up to 4 inches in colder

climates. A two-inch coverage will usually require 150 to 200 bales per acre, depending on the density of the bale. Colder climates will approach 400 bales per acre.

As requested in the last two newsletters, I would still like to hear from more growers on which apple varieties are most susceptible to cork spot. If you are an apple grower in Illinois (or even near Illinois), please take a few minutes to contact me via phone or email to report your observations.

The Illinois Cider and Hard Cider Contest will again be held at the Illinois Specialty Crops Conference in Springfield, January 20 -22, 2005, and will be hosted by the Illinois State Horticulture Society. One gallon of sweet cider and/or 1 quart of hard cider will be required for the judging contests. Registration for all cider contests will be on January 21st, from 8:00-9:45am, with a registration fee of \$10.00 per entry. Judging will commence at 10:00am. As information concerning the Specialty Growers Crops Conference becomes available, it will be posted on the Illinois Specialty Growers Association website: http://www.specialtygrowers.org/. Follow the conference links to view the cider contest press release and registration form.

In addition to the Illinois Specialty Crops Conference, several other fruit and vegetable programs for the southern region have been scheduled. As more detailed information becomes available, I will post them to my website: http://web.extension.uiuc.edu/regions/hort/.

Elizabeth Wahle (618-692-9434; wahle@uiuc.edu)

At the Dixon Springs Ag Center: Time for some quick reminders to plasticulture strawberry growers ... it's time to ...

- remove any runners from the mother plants.
- watch the weather, row covers should go on when you are going to have 3-4 nights in a row with temperatures 26-27 degrees F or below.
- remember that your goal is to have 3-5 branch crowns per plant by the time you cover the plants for the winter.

This fall season has yielded good growing conditions for plasticulture strawberries, and plants should be healthy, dark green and sizing well. Also be sure to note that the dates for the 2005 Illinois Small Fruit and Strawberry Schools at Mount Vernon are March 1-2. At the 2005 schools, Dr. Barclay Poling from North Carolina State University will be speaking on plasticulture and the utilization of row covers.

Bronwyn Aly (618-69502444; baly@uiuc.edu)

In northern Illinois, day temperatures in the upper 50s to low 70s characterized the last 10 days of October, and the area recorded about an inch of rain during that period. The trend changed in the early part of November, and day temperatures are now in the upper 40s to low 60s, with night temperatures in the upper 20s to low 40s. The region has received 1-2 inches of rainfall so far in November. Some pick-your-own apple orchards remain open. The pumpkin crop this year was much better than the crop in the last year three years, and pumpkin fruits, as well as some winter squash, are still in the field in some farms. Cabbage harvesting ended last week, and some fields have been plowed and cover crops planted in Kankakee area.

Maurice Ogutu (708-352-0109; ogutu@uiuc.edu)

News from the St Charles Horticulture Research Center

Recent developments at the St Charles Horticulture Research Center may enable researchers in horticulture at the UI to improve and increase research activities in food crops in the northern section of Illinois. After 10 years of negotiation, the Department of NRES is finalizing the processing of a new lease for the property at the Research Center. The State of Illinois Illinois Department of Corrections owns the land. It has agreed to provide additional acreage and another 40 years to the lease arrangement. With the additional acreage the property will be working just over 100 acres. It currently operates on just 25 acres. The new property is prime farmland on the western edge of the Chicago metropolitan area. Many of the state's specialty crop farmers operate in that zone because of market proximity. The Research Center is in an ideal location for conducting specialty crop research in conditions that are similar to those experienced by the industry in northern Illinois. The Research Center will take possession of this new acreage on January 1, 2005.

New programs will certainly be initiated at the Research Center with this additional acreage. Additional support will be necessary for these programs to develop, so a major effort will be made to find partners and build a capital campaign. Among the new food crop programs expected to develop with this new opportunity are tree fruits, particularly apples, and organic

food crop research. A portion of the new acreage will be established as transitional acreage toward organic certification in 2005. The green industry will also play a major role in developing new programs of research and demonstration at the Research Center.

In other news, a unique one-time opportunity was given to NRES faculty recently to provide proposals for equipment that would enhance the department's ability to serve its stakeholders. Superintendent Bill Shoemaker of the Research Center submitted a proposal that was supported by the Department Head, Dr. Wes Jarrell for the purchase of a Hardi LP100 Mistblower. The mistblower will be used in support of the current grape research program at St Charles and may play a role in certain vegetable research programs as well. The grape industry may be the fastest growing specialty crop in the state right now and is growing as fast in the north as anywhere. Additionally, it can be an important tool for building research programs in tree fruits at the Research Center. This area has been neglected due to lack of support, but with this acquisition the Research Center is a step closer to being prepared to conduct research in apples, an increasingly important direct-market crop in northern Illinois. Ongoing research in peaches at the Research Center will also benefit from this purchase.

Bill Shoemaker, 630-584-7254; wshoemak@inil.com)

Upcoming Meetings

Details on registration and program contents for the 2005 listings in this section will be presented in later newsletter issues, but this early notice should let you mark the dates on your calendar.

Organic Gardening Day, November 20, Champaign, IL

For details, contact Chuck Voigt (217-333-1969; c-voigt@uiuc.edu)

Illinois-Iowa Fruit and Vegetable Growers Conference, December 2, 2004

The Illinois-Iowa Fruit and Vegetable Growers Conference is scheduled for 1:00 to 5:00 p.m. on December 2, 2004, at the Quad City Botanical Center, 2525 4th Avenue, Rock Island, IL. General session topics include using honey bees for pollination (Skip Pronger) and responding to weather events (Ray Wolf). Breakout sessions will focus on grapes, tree fruits, and vegetables, with topics including disease control in grapes and vegetables, nutrition and leaf analysis, micronutrient effects, orchard management, apple rootstocks, tomato and pepper varieties, gourmet muskmelons, and the use of colored plastic mulches. Speakers include Paul Domoto, Bill Shoemaker, Mohammad Babadoost, Jim Nickell, Mosbah Kushad, Maury Wills, Vince Lawson, and Maurice Ogutu. Registration is \$25 per person for the first member of each farm enterprise, \$20 for the second person from the same enterprise, and \$15 for additional members. Registration is being handled by the Johnson County (IA) Extension Office – 319-337-2145. For more information, contact Martha Smith at the University of Illinois Extension Center in Macomb (309-836-2363; smithma@uiuc.edu) or Maurice Ogutu at the University of Illinois Extension Center in Countryside (708-352-0109; ogutu@uiuc.edu).

Pesticide Safety Education Program, Matteson, December 15, 2004

This program will provide Private Pesticide Applicator training and testing on December 15, 2004, at the Matteson Extension Center, Matteson, IL. Pre-registration is required; contact the Matteson Center at 708-720-7520. The topics include Horticulture IPM, air blast sprayer calibration, labels, etc. Training will be focused on fruits, vegetables, and greenhouse production.

Illiana Vegetable Grower School, January 6, 2005

... at Teibel's Restaurant in Schererville, Indiana. For more information, contact Maurice Ogutu at the University of Illinois Extension Center in Countryside (708-352-0109; ogutu@uiuc.edu).

Illinois Organic Production Workshop, January 12-13, 2005

... providing farmers with practical, science-based information on organic production and certification. January 12 - 13, 2005, at the Holiday Inn, Normal, Illinois. The January 12 program runs from 9:00 a.m. to 6:00 p.m; January 13 runs from 7:00 a.m. to 12:45 p.m. Registration is \$75 in advance or \$100 at the door. For details, contact Dan Anderson, 217-333-1588, aslan@uiuc.edu.

Southern Illinois Tree Fruit School, February 1, 2005

... at the Holiday Inn, Mt. Vernon, Illinois. Registration will include the 2005 Commercial Tree Fruit Spray Guide. Contact Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Southwestern Illinois Tree Fruit School, February 2, 2005

... at the First Presbyterian Church, Hardin, Illinois. Registration will include the 2005 Commercial Tree Fruit Spray Guide. Contact Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Southern Illinois Vegetable School, February 9, 2005

... at the Holiday Inn, Mt. Vernon, Illinois. Registration will include the 2005 Midwest Vegetable Production Guide for Commercial Growers. Contact Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Illinois/Wisconsin (Stateline) Fruit and Vegetable Conference on Thursday February 17, 2005

... at Lake Lawn Resort in Delavan, Wisconsin. Contact Maurice Ogutu ((708-352-0109; ogutu@uiuc.edu).

Missouri Small Fruit and Vegetable Conference, February 21-23, 2005

... program under development. Contact Pamela Mayer (417-926-4105; pam621t@smsu.edu).

Kankakee County Vegetable Grower School on Thursday February 24, 2005

... at the Kankakee County Extension Office Bourbonnais, IL. Contact Maurice Ogutu ((708-352-0109; ogutu@uiuc.edu).

Illinois Small Fruit and Strawberry Schools, March 1 - 2, 2005

... at the Holiday Inn, Mt. Vernon, Illinois. Registration will include the 2005 Midwest Commercial Small Fruit and Grape Spray Guide, the Midwest Small Fruit Pest Management Handbook, and the school Proceedings. (Contact Bronwyn Aly (618-695-2444; baly@uiuc.edu) or Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Vegetable Production and Pest Management

Effect of colored plastic mulches on tomato, muskmelon, and pepper growth and yield in 2004

The following are three brief summaries of colored plastic mulch trials conducted at the St. Charles Research Center in 2004; more details will be discussed at winter educational programs ...

Tomato variety 'Sunstart' seedlings transplanted in white, and reflective plastic mulches were taller than seedlings planted in black smooth, black embossed, clear, blue, red, and olive mulches by July 24, 2004. Seedlings planted on bare ground or on yellow plastic mulch were much smaller compared to the other treatments. Weeds were growing underneath clear, yellow, and red plastic mulches, and squash bugs were observed in yellow plastic mulch treatment on July 2. Cumulative marketable tomato yield was highest in plants grown in reflective and white plastic mulches, and lowest in plants grown in yellow plastic mulch. Marketable fruits from plants grown in reflective, and white mulches were larger than fruits from other treatments. In comparison with black embossed plastic mulch commonly used by vegetable growers, plants grown in reflective and white plastic films had 2 and 1.2 more tons/acre respectively of marketable tomatoes than plants grown in black embossed plastic mulch.

Muskmelon variety 'Athena' seedlings transplanted in black embossed, olive, red, blue, and white plastic mulches had longer vines than seedlings transplanted in black smooth, reflective, clear, and yellow mulches by July 24. Seedlings planted on bare ground had much shorter vines. The cumulative fruit number and weight was higher in blue, olive, red, and black embossed plastic mulches than in plants grown in clear, yellow, and reflective plastic mulches, with the lowest yields in white, bare ground, and black smooth treatments. In comparison with black embossed plastic mulch, seedlings planted in blue, olive, and red plastic had more fruits.

Bell pepper variety 'Crusader' was transplanted into black embossed, blue, red, olive, and reflective plastic mulches. There was no significant difference in fancy fruit number and weight, and US No.1 fruit number among the treatments. However, US No.1 fruits in reflective, black embossed, blue, and olive plastic mulch treatments had higher weight than in red plastic mulch. The total number and weight of fancy and US No.1 combined was not significantly different among treatments, but the reflective mulch treatment had higher fruit number (1200 fruits/acre) weighing about 672 pounds more than black embossed plastic mulch (data from one picking). The difference may be even higher with 2-3 more pickings.

Maurice Ogutu (708-352-0109; ogutu@uiuc.edu)

This week's words of wisdom ...

A few of the jokes from the end-of-the year clearance show of the Prairie Home Companion on November 6, 2004 ...

- You've heard the "What's red, white, and blue?" riddles, right. So now, what's gray? A melted penguin.
- What do you get if you take the Titanic across the Atlantic? Halfway.
- John goes to the doctor for a physical exam after not having been in for a couple of years. The physician says, "Haven't seen you for a while." John says, "Well, I've been sick."
- I was on the way home on a Friday evening, and the state trooper pulled me over. He said, "Your eyes are bloodshot, have you been drinking?" I answered, "Hello to you too, Officer. Your eyes are glazed, Have you been eating donuts?"
- Why did the chicken cross the road? To try to show the damn deer how to do it.
- A school teacher was boarding a flight from Indianapolis to Denver and was pulled out of the line for security screening. He was carrying a slide rule and a calculator. The security folks were suspicious because they thought he might be a member of the terrorist group Al-jhe-brah.
- A police dog sought to move up in the world, so when he saw an add for dogs to work for the FBI, he applied. The FBI Canine Resources officer asked him if he could type 40 words per minute. He answered, "Woof!" Sure enough, he typed 60 words per minute. Then the Canine Resources person told him he would have to pass a physical exam and complete the obstacle course in less than 60 seconds. The dog answered, "Woof, woof!" Sure enough, he passed the physical and completed the obstacle course in record time. Finally, the fateful last question ... "Do you meet the toughest requirement, are you bilingual?" The dog knew he had passed, he answered, "Meow."
- And last, the local surgeon always ended his long day in the Operating Room by stopping by the local bar for a hazelnut daiquiri. The bartender always expected him and was ready to prepare his favorite drink. But one day the bartender found himself out of hazelnut extract, and he struggled at the last minute to try to find a substitute. He made the doctor's drink with hickory nut flavoring instead, but the physician noticed immediately and complained, "This is not a hazelnut daiquiri." The bartender admitted to the switch and said, "You're right." He continued to tell the physician, that the drink was, in those well-known words of rhyming fame, a "hickory daiquiri doc."

Hey ... the previous issue, played on the pun ... there has to be some dependable continuity from issue to issue, right?

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

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