



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, weinzierl@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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Open Positions for Local Food Systems / Small Farms Extension Educators

University of Illinois Extension is seeking applicants for five Local Food Systems and Small Farms educator positions. These are full-time, 12 month academic professional positions. Extension Educators are expected to deliver research-based educational programs and to work within team settings that may consist of other Extension Educators, community college professionals, and faculty within and outside of the College of ACES.

These positions focus on the development of educational resources for small farm producers, outreach to communities on issues related to local food systems, and team-based outreach efforts. Development and delivery of high impact and relevant educational programs and materials in several of the following areas will be important: 1) small farm production and planning, 2) marketing of local food initiatives, 3) food safety and Good Agricultural Practices (GAPs), 4) small farm fruit, vegetable, and livestock production (may include organic), 5) integrated pest management, 6) harvest/post-harvest handling and storage of produce, and 7) general agronomic/livestock production principles.

Each of the following units has a full-time opening for an Extension Educator, Local Food Systems and Small Farms:

- Unit 1: JoDaviess/Stephenson/Winnebago counties
- Unit 3: Lake/McHenry counties
- Unit 4: Carroll/Lee/Whiteside counties
- Unit 17: DeWitt/Macon/Piatt counties
- Unit 26: Franklin/Jackson/Perry/Randolph/Williamson counties

Extension Educators are administratively responsible to the County (Unit) Director and are programmatically responsible to the Program Leader for Agriculture and Natural Resources for the delivery of programs that mesh with identified national and state priorities.

Qualifications: A Master's degree related to subject matter emphasis is required. Examples of relevant majors could include, but are not limited to, agronomy, animal science, entomology, horticulture, plant pathology, soil science, or

weed science. Candidates with a Master's degree in progress may be considered for interviews, but the degree must be completed by the hiring date. Candidates must possess excellent oral and written communication skills, as well as effective interpersonal skills and the ability to work within a team environment. Experience within the specialty field is highly desirable, as are informal and formal teaching experience and a demonstrated ability to build and maintain diverse networks.

For more information and to apply, see <http://go.illinois.edu/26389> and click Apply Now. To receive full consideration, all requested application materials must be submitted via the online system by the closing date of January 11, 2013. For further information, contact Michael Gray at megray@illinois.edu. *Illinois is an Affirmative Action /Equal Opportunity Employer and welcomes individuals with diverse backgrounds, experiences, and ideas who embrace and value diversity and inclusivity.* (www.inclusiveillinois.illinois.edu).

Upcoming Programs

Two upcoming winter programs of broad interest to Illinois commercial fruit and vegetable growers in December and January are the Great Lakes EXPO, December 4-6, and the Illinois Specialty Crops, Agritourism, and Organics Conference, January 9-11, 2013. These programs are listed first, below, followed by several other local and regional programs.

- **Great Lakes EXPO, December 4-6, 2012.** Grand Rapids, MI. A comprehensive program that covers production and marketing of a broad range of fruit and vegetable crops and farm marketing, including tracks for organic and greenhouse growers as well as conventional outdoor production. For more information, see <http://www.glexpo.com/>.
- **Illinois Specialty Crops, Agritourism, and Organics Conference, January 9-11, 2013.** Crowne Plaza Hotel and Conference Center, Springfield, IL. More details to come, but mark your calendars. Workshops on January 9 will cover high-tunnel production systems, cover crops, basics of orchard establishment and management, and sweet corn production and pest management. Concurrent tracks on January 10-11 include fruits, vegetables, herbs, agritourism, organic production systems, and emerging issues and challenges in specialty crop production and marketing. The 2013 program flyer with the complete meeting agenda is available online by following links at the Illinois Specialty Growers Association page at <http://www.specialtygrowers.org/> (directly by clicking <http://jhawkins54.typepad.com/files/pre-conference-flyer-2013.pdf>).
- **Training and testing for a Private Pesticide Applicator license** is offered at multiple locations in the next few months. A Private Applicator's License is required for the purchase and use of Restricted-Use pesticides. These training programs are very strongly oriented to field crop agriculture (corn, soybeans, wheat, and alfalfa) because most of the state's private applicators (farmers) grow these crops, but there is only one test for private applicators, regardless of the crops you grow. Use <http://web.extension.illinois.edu/psep/> to learn the dates and locations for programs for Private Applicators (not Commercial Applicators).
- **Building the Base of Your CSA: Best Practices, Including Member, Volunteer, and Intern Agreements Webinar, December 10, 2013.** 6:00 – 7:30 p.m. Covers potential legal risks of running a CSA and strategies for crafting a CSA member agreement to improve customer satisfaction and retention. For more information and to register, see <http://web.extension.illinois.edu/units/event.cfm?UnitID=483&EventID=59583>.
- **Transplant Success Webinar, December 12, 2013.** 1:30-3:00 p.m. Covers transplant production, including media, crop planning, dealing with environmental factors, and planting out successful transplants. 1:30-3:00 p.m. For information and to register, see <https://webs.extension.uiuc.edu/registration/?RegistrationID=7337>.
- **2013 Small Farm Webinar Series** ... see the schedule below under the *Local Foods Issues* heading.
- **Southern and Southwestern Illinois Tree Fruit Schools, February 5 and 6, 2013.** Programs will be held at Mt. Vernon and Hardin. More information to come.
- **Stateline (IL-WI) Fruit and Vegetable Conference, February 11, 2013.** Midway Village Museum, Rockford, IL. More information to come.
- **A combined vegetable and small fruits program (production, pest management, marketing), February 12-13, 2013,** will be held in Mt. Vernon ... more details to come.
- **Adams County / Western Illinois Fruit and Vegetable School, February 22, 2013.** Quincy, IL ... more details to come.
- **Kankakee-area Vegetable Growers School, February 26, 2013** ... more details to come.

Notes from Chris Doll

After a long, hot, and dry summer, St. Louis climatologists are predicting a more adverse winter with snow and cold. I agree with them, and we have a 33 percent chance of being correct ... since it could be warm, average, or colder than normal. Defoliation of fruit trees is nearly complete, and the buds and wood should be well hardened off. The buds are dormant because of being in the endodormancy stage, in which they will remain until the rest period has been broken by enough hours of cool/cold temperatures. Late January is the usual period when peach growers begin to worry about warm temperatures.

Some pruning of apple trees is ongoing when growers are not out hunting. With the reduced vegetative growth during the dry summer, there should be less wood to prune out. And apple growers who have high density systems have little to do at this time because of the effects of dwarfing stocks and summer pruning and training. Early winter pruning of other fruit crops such as peaches and grapes is riskier, because they are more susceptible to cold injury than apples. Years ago, I pruned thornless blackberries on the 15th of December. January and February were COLD and resulted in complete kill of the canes pruned in the previous two months (ahead of the severe freeze). I have also seen peach trees killed when pruned ahead of sub-zero temperatures.

Matted row strawberry fields can have herbicides and straw applied now. Plasticulture strawberry fields are already under the row covers. Dr. Poling in North Carolina has already issued several advisories about getting row covers on in the southeastern states. The plantings that I have seen this fall look good.

Time marches on, and I see that Jerry Frecon, an outstanding extension man and peach variety expert is retiring from Rutgers University. His name is on some winter programs, so there are some opportunities to hear his latest reports. In a recent Rutgers Plant and Pest Advisory, he summarized his testing of the "Prince" series of peaches developed by Dr. Dick Skokie in Georgia. Listed as the best selections evaluated in recent years were Spring Prince, Ruby Prince, Blaze Prince, Scarlet Prince, July Prince, Early August Prince, August Prince, and Flame Prince. He indicated that Flame Prince has been planted in New Jersey as a replacement for Encore and Laurel. My experience is that it is better than Encore, but not as bud hardy. I hope that his variety work and reports will be continued.

The November 2012 issue of *Produce Business* included a listing of "Fastest Growing Snack Foods" that showed that Fruit led the list that included yogurt, nuts, nutrition bars, and chips. The quoted survey of number of using fruits for snacks was led by bananas, followed by apples, berries and oranges. The article noted that consumers over 65 eat the most fruit, teens between 13 and 17 eat the least, and females eat more than males.

In my files is a report by one of my mentors at Iowa State University written 54 years ago. Included was the statement that the pallet bin (bulk bin) was first used in Michigan in 1954 and in Washington in 1957. At that time, Delicious was the leading variety of apples, followed by McIntosh, Winesap, Jonathan, Rome, Stayman, and Golden Delicious. The apple rootstocks being planted and researched were M9, M7, Clark, M2, M13 and M1, with the MM series just getting started. A piece of philosophy included with the following: "You are not old if when you plant an apple tree in a row, you get a thrill deep down inside to see those trees grow."

The Illinois State Horticulture Society and ISGA convention (the Illinois Specialty Crops, Agritourism, and Organics Conferenced) in Springfield is only a few weeks off (January 9-11), and I look forward to seeing friends and visitors for a great social and educational time. The fruit program has some timely topics such as irrigation following a dry year, weather and its effects for any year, varieties, rootstocks, and pest control, and guest speakers Matt Moser from Michigan and Dr. Greg Reighard from Clemson University in South Carolina, who should also have an update on peach rootstocks included in his reports. A new feature this year is a workshop on "Basics of Tree Fruit Establishment and Production" on Wednesday, January 9.

Chris Doll

Fruit Production and Pest Management

Should you plant trees in the fall or wait until early spring?

A few weeks ago I had a discussion with a couple of colleagues about the risks associated with planting apple trees in the fall or spring. It seems from our discussion that there are two schools of thought. Some folks in Michigan and in

Ontario are strongly in favor of planting apple trees in the fall. They reported that trees did better when planted in the fall than in the spring. However, some folks in Virginia/West Virginia and North Carolina seem to think otherwise. Here are a few comments to support both arguments and the risks/rewards that you may consider when making your decision.

Supporting arguments for why you should plant in the fall: You have plenty of time to plant and care for the trees. The soil is still warm in the fall and so there is plenty of time for the roots to grow. You do not need to keep the trees in cold storage where there is a high risk that they may freeze, dry up, or bloom in storage. Fall-planted trees grow better the following spring because their roots have plenty of time to grow and supply nutrients to the top of the tree.

Supporting arguments for why you should plant in the spring: Spring is an appropriate time to plant all types of trees. There is very little risk that the roots will freeze during the cold winter. There is little risk that the trees will dry up because there is plenty of free moisture in the soil. There is no need to build a hill around the trunk of the tree to avoid winter damage to the graft union. Trees will start growing soon after planting and so you will be able to quickly tell which trees are alive.

Here is what you may need to know when planting in the fall. As I indicated above, fall planting has its rewards, but there are risks as well. The greatest risk to temperate fruit trees such as apples, pears, peaches, plums, and cherries comes is winter damage to the root system. The root systems of all living plants continue to grow in the fall and winter, but at different rates depending on the species and cultivar. Trees with slow growing roots such as stone fruits (apricots, peaches, cherries, and plums) are likely to be severely damaged by fall planting, especially if the trees are planted in late fall. Additionally, if it rains, free water around the root system is likely to cause severe damage. A typical practice is to mound the dirt into a tapered hill around the root system to divert water away from the tree.

In warm fall areas or in areas where there is early snow cover in the fall, it is likely that the ground remains sufficiently warm for the roots to continue to grow with minimal chances of freezing. However, in areas of early fall soil freezing or in areas with little snow cover in early winter, root damage is likely to occur. Because apple and possibly pear wood goes through deeper winter dormancy than stone fruit wood, it is likely that apple tree roots will benefit from early fall planting, especially if there is good snow cover or the soil remains warm for a good part of the fall and early winter.

My guess as to why fall planting of apples is being used by some Michigan and Ontario growers centers on two possible reasons. One, the snow cover from lake-effect snows may be keeping the soil warm long enough for the roots to grow. Second, fall soil freezing in these areas is typically not so long or intense to cause frost penetration deep into the soil. However, as temperature drops and solar radiation declines in late fall, root zone soil loses its heat quickly, posing a great risk to the survival of roots.

What should you do if you live in Illinois or areas of similar climate? Illinois stretches into three USDA climate zones, 4b, 5 a & b, and 6 a & b. Air temperature differences between northern and southern Illinois in the fall are estimated to be 10°F for the high and 8°F for the low. I could not find similar data for soil temperature differences. Nonetheless, it is reasonable to assume that planting apple trees in southern Illinois in the fall is doable. However, as you move further into central and northern Illinois, the risk of freezing temperatures is too high to plant apple trees in the fall or early winter. Stone fruits should not be planted in the fall regardless of the snow cover or fall temperature risk. For this reason, most reputable nurseries will not ship trees in the fall because of liability.

Mosbah Kushad (217-244-5691; kushad@illinois.edu)

Vegetable Production and Pest Management

What weather lies ahead?

OK, Chris Doll's note referenced one set of predictions. But of course, other forecasters disagree. Here's another take, along with some thoughts about what can be done.

It is November, and we have had some 60-degree days here and there, which begs the question, are we going to witness another warmer-than-usual winter?

According to www.weather.com (see figure), temperatures will be warmer-than-average through December, with the highest above-average temperatures stretching from mid-Missouri Valley to the Great Lakes, and will include cities such as Chicago, Detroit, Michigan, Des Moines, Iowa and Kansas City.



Inevitably, the often-asked question will follow: will warmer temperatures increase the chance of insect survival? It would be expected that insects that overwinter above ground, such as bean leaf beetle adults would survive better with fewer cold days. However, a lack of snow cover could dispose those same insects to below-freezing temperatures, and increase mortality. Insects such as Japanese beetles that overwinter below ground will likely not be affected. On the other hand, warmer-than-normal temperatures could break dormancy in insects, which would become active and then not find food, and therefore die, having spent all their stored fat reserves. It is apparent that various factors affect the survival of insects in winter.

It is reported that every 20 years or so, a drought happens, with a 3-5 year severe period (for example, see www.maine.gov/mema/prepare/prep_display.shtml?147337). Are we just about getting out of the current year drought, or will we still be in it yet in 2013?

If the winter is mild, as happened last winter, and is followed by a warmer-than-usual spring and a dry summer, producers will need to have a drought preparedness plan in place. Insurance, water availability for irrigation, plant cooling methods, and other strategies will need to be adopted.

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Local Foods Issues

A Reminder on the 2013 Small Farm Webinar Series

Not all of these pertain to fruit or vegetable production, but ...

The Small Farm Webinar Series is a weekly educational series for the small farm community and provides practical knowledge on emerging topics which advance local food production in Illinois. This series of online events is aimed at providing small farm producers with a look at how leading practices in production, management, and marketing enable operations to improve predictability and sustainability.

The dates and topics ...

January 10, 2013	Raising Broiler Turkeys on Small Farms
January 17, 2013	Strawberry Production
January 24, 2013	Water Sanitation For Small Farms
January 31, 2013	Wildlife Damage Control
February 7, 2013	Basics of Fruit Insect Management
February 14, 2013	Farm Financial Management
February 21, 2013	Seed Saving
February 28, 2013	Crop Rotations in High Tunnels
March 7, 2013	Farm to School Sales - What's involved?
March 14, 2013	Beneficial Insects
March 21, 2013	Weed control in pastures
March 28, 2013	Crop Budgeting Resources

All programs are offered on-line. They will also be available via the small farm webinar archive site. More information regarding registration will be forthcoming. Any questions regarding the series can be sent to Kyle Cecil,

Small Farm Educator, University of Illinois at cecil@illinois.edu or by contacting any of the Small Farm Educators listed at the end of this newsletter.

Kyle Cecil (309-342-5108; cecil@illinois.edu)

Less seriously ... some southern humor

A senior citizen in Louisiana was overheard saying, "When the end of the world comes, I hope to be in Louisiana." When asked why, he replied, "I'd rather be in Louisiana 'cause everythang happens in Louisiana 20 years later than in the rest of the world."

A young man from Mississippi came running into the store and said to his buddy, "Bubba, somebody just stole your pickup truck from the parking lot!" Bubba replied, "Did y'all see who it was?" The young man answered, "I couldn't tell, but I got the license number."

A man in South Carolina had a flat tire, pulled off on the side of the road, and proceeded to put a bouquet of flowers in front of the car and one behind it. Then he got back in the car to wait. A passerby studied the scene as he drove by, and was so curious he turned around and went back. He asked the fellow what the problem was. The man replied, "I got a flat tahr." The passerby asked, "But what's with the flowers?" The man responded, "When you break down they tell you to put flares in the front and flares in the back. I never did understand it neither."

A Tennessee State trooper pulled over a pickup on I-65. The trooper asked, "Got any ID?" The driver replied, "Bout whut?"

The Sheriff pulled up next to the guy unloading garbage out of his pick-up into the ditch. The Sheriff asked, "Why are you dumping garbage in the ditch? Don't you see that sign right over your head." "Yep," he replied. "That's why I'm dumpin' it here, 'cause it says: 'Fine For Dumping Garbage.' "

Still ... You can say what you want about the south, but you never hear about anybody retiring and moving north.

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