

College of Agricultural, Consumer, and Environmental Sciences

# Illinois Fruit and Vegetable News

Vol. 10, No. 4, March 18, 2004

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

This issue's words of wisdom ... which usually means the jokes ... are at the end of newsletter ... check the last page.

#### In this issue ...

Crop and Regional Reports (from Maurice Ogutu)

**Notes from Chris Doll** (phenology same as 2003, plasticulture strawberry development, grafting season, and Apogee) **Upcoming Programs, Opportunities** (Spring Viticulture Workshops, Grape and Wine Industry Strategic Round Table, IDFTA Summer Tour, listing your operation in "Farm-Direct"))

Fruit Production and Pest Management (Great Eastern Brood of 17-year cicadas ... in a few Illinois counties)

Vegetable Production and Pest Management (Corn flea beetle and Stewart's wilt predictions)

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

## Crop and Regional Reports

**In northern Illinois**, ... signs of spring (if you look closely through the snowfall ... from March 9-17, day temperatures ranged from the 30s to 50s, and night temperatures dropped to the upper teens to low 30s. The region received about 0.2 to 0.7 inches of rainfall, and 0.2 to 5 inches of snow during the same period. Snows were heaviest in the northwestern part of the state. More snowfall recorded in counties close to River Mississippi & in central Illinois than in northeastern Illinois counties. Through it all, pruning of grapes and fruit trees continues.

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

## Notes from Chris Doll

Not much has changed in fruit phenology since the last report. Some apples have moved into the early silver tip stage, and swollen peach buds are easy to see. I thought that it was a late season, but a record check shows the same stage of development a year ago. If growers in this area want to check back for years with earlier development, look at 2000 or better yet the year of 1995 when apples were at ½ inch green and peaches were in pink on March 28.

Our wet soils have settled and some tree planting is ongoing. It is hoped that the spring rains will settle the soil around the roots where it was too wet for good planting.

I saw a couple of plantings of plasticulture strawberries this week. New growth and early bloom are poised to move with a few warm, sunny days. One of the fields has some Sweet Charlie's that bloomed out early and were frozen. Only a few early Chandler flowers were frozen. The e-mail box has been filled with frost forecasts and discussion by our North Carolina mentor(s) recently. April will give Illinois growers their test.

The grafting season is rapidly approaching, and it is now at the end of the season for cion wood collection in this area. Grafters to the north still have time to cut dormant cions. I prefer to wait until the some green is showing on the stock to begin. It can then continue through bloom season if the cion wood is kept in good condition. Patent violation problems in the Northwest illustrate that patent royalties must be paid ... or else bypass those varieties.

Apogee was used in several orchards last year to try to reduce fire blight infections and for growth control. It was difficult to determine the effectiveness of fire blight control and my analysis is that it did not hurt anything. Growth control as indicated by reduced pruning time was good in several blocks, especially when sprayed on trees with a good-sized crop. Fuji, Spur Reds, Suncrisp, and some Jons and Goldens were most responsive. Vigorous Goldens and Jons tended to grow out of the effects in the latter part of the season. It appears that more will be used this year.

#### Chris Doll

## Upcoming Programs, Opportunities

### Spring Viticulture Workshops

Three viticulture workshops are scheduled for April at three locations. The dates and places:

April 3, 2004, at Carbondale (register by March 26) April 16, 2004, at Oakford (register by April 9) April 17,2004, at Galena (register by April 9)

For additional information or to register, contact Dr. Dianna Reusch in the SIUC Division of Continuing Education at (618) 536-7751 or <a href="http://www.dce.siu.edu">http://www.dce.siu.edu</a>.

#### Illinois Grape and Wine Industry Strategic Round Table

An Illinois Grape and Wine Industry Strategic Round Table is scheduled for Saturday, March 27, 2004, 10:00 a.m. to 2:00 p.m., at the Illinois Building, Illinois State Fairgrounds, Springfield, Illinois. The purpose of this meeting is to chart a business plan for this industry to promote profitable growth in all sectors for next year and the next 10 years. Anyone with a vested interest in the Illinois grape and wine industry is encouraged to attend. The program will begin in the Lincoln Theater for introductory remarks, then break into four group sessions: viticulture, enology, marketing, and legislation. Participants in these breakout sessions will be asked to prioritize the immediate needs of the industry. After lunch the whole group will gather back in the Lincoln Theater.

The Illinois Building is located just inside the main gate of the State Fairgrounds, off of Sangamon Avenue. Look for the statue of Abraham Lincoln and watch for signs. There is a charge of \$5.00 per person to cover the cost of pizza and soda for lunch. Please contact Kent McFarland (217-524-9131 or <a href="mailto:kmcfarland@agr.state.il.us">kmcfarland@agr.state.il.us</a>) for more information and to preregister.

### International Dwarf Fruit Tree Association Summer Tour

The IDFTA summer orchard tour will take place in Wisconsin and Minnesota this year; the dates are June 20-22. The tour will be headquartered in LaCrosse, WI – not all that far from Illinois. More details will be provided in this newsletter as the dates approach. If you need more information right away, contact Teryl Roper at the University of Wisconsin (trroper@wisc.edu).

### Listings in "Farm-Direct"

The Farm-Direct Guide, which in its initial year in 2003 listed many growers and processors who sell fruit, vegetables, herbs, meats, poultry, honey, flowers, eggs, cheese, pumpkins, syrup, agri-tourism, and similar products directly to local consumers, is being expanded this year to encompass the whole state of Illinois. Last year it focused only on 25 counties in central Illinois.

The publishers of the Farm-Direct Guide would like to list all Illinois operations in the new guide. This is a free service. If you sell your product directly in some manner to Illinois local consumers, send the following information via email to <a href="mailto:stuarttarr@hotmail.com">stuarttarr@hotmail.com</a> or US Mail to Stuart Tarr at Farm-Direct, Dept. of NRES, University of Illinois, 1201 S. Dorner Dr., Urbana IL 61801. The information that's needed is: your name or company name, address, phone, (email and web url if you have them), hours/days of operation, and what products you sell. If you don't want your phone or email listed please let us know. If you wish to include a short statement about the nature of your products or your business, i.e. organically grown, or U-Pick, etc., we will include that also in the listing.

## Fruit Production and Pest Management

### Periodical Cicadas?



Periodical cicada

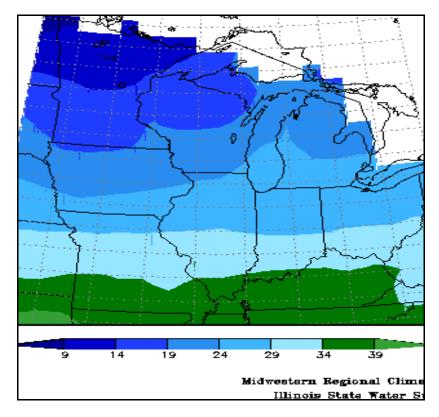
Several stories have aired on various radio stations and shown up in newspapers in recent weeks about 2004 being a year for a major periodical cicada emergence. And it is ... but not for very much of Illinois. The "Great Eastern Brood" (or Marlatt's Brood X) of 17-year cicadas will emerge across a broad area of eastern North America in 2004. Although this emergence will indeed be "a big deal" in Indiana and eastward, the Great Eastern Brood extends into Illinois only in a few counties along the eastern border – Vermilion, Edgar, and Clark counties. Take heart, however, northern Illinois can look forward to 2007 when the Northern Illinois Brood of 17-year cicadas will emerge. For more information on cicadas, check "Cicadas of Michigan" at <a href="http://insects.ummz.lsa.umich.edu/fauna/Michigan Cicadas/Michigan/Index.html">http://insects.ummz.lsa.umich.edu/fauna/Michigan Cicadas/Michigan/Index.html</a>.

Rick Weinzierl (217-333-6651; weinzier@uiuc.edu)

## Vegetable Production and Pest Management

#### Predictions for Corn Flea Beetle Survival and Prevalence of Stewart's Wilt in Sweet Corn

Variable winter temperatures across the state have resulted in varying predictions of Stewart's wilt in corn this spring. Overall, the average winter temperatures of December, January, and February of 2003-04 were warmer than the average winter temperatures last year. What does this mean for corn flea beetle survival and Stewart's wilt?



Average daily temperature (°F) from December 1, 2003 to February 29, 2004 (From Midwest Regional Climate Center, Illinois State Water Survey, Champaign, IL).

Corn flea beetles are the only significant vector of the pathogen that causes Stewart's wilt. *Erwinia stewartii*, the bacterium that causes Stewart's wilt, survives the winter in the gut of the corn flea beetle. Survival of the corn flea beetle is dependent on winter temperatures ... warmer winters result in greater survivorship of corn flea beetles, thus increasing the potential for Stewart's wilt. Using the average temperatures for December, January, and February, the potential for early-season Stewart's wilt can be predicted (Table 1).

Table 1. Projected risk of Stewart's wilt based on the average temperatures of December, January, and February.

Average temperature of December, January, & February	Probably of early season wilt	Probably of late season blight
<27° F	Absent	Trace, at most
27 - 30° F	Light	Light to Moderate
30 - 33° F	Moderate	Moderate to Severe
>33° F	Severe	Severe

Corn flea beetles become active in the spring when temperatures rise above 65°F, and they begin feeding on corn seedlings, inoculating them with the Stewart's wilt pathogen. The bacterium can spread systemically throughout the plant. There are two phases of Stewart's wilt: the seedling wilt phase and the leaf blight phase. The seedling wilt stage occurs when seedlings

become infected at or before the V5 stage. The growing point is easily infected. The vascular system becomes plugged with bacteria, causing the seedling to wilt and die. Infections of older corn plants usually result in the development of the leaf blight phase of Stewart's wilt. This phase is characterized by long, yellow to chlorotic streaks with wavy margins along the leaves. Although most commercial field corn hybrids are resistant to Stewart's wilt, the disease is still a concern for susceptible seed corn inbreds and many early sweet corn hybrids.

Based on the recent winter temperatures from the Midwest Regional Climate Center, estimates of early season Stewart's wilt are shown in Table 2. Remember, however, that these are only predictions; numbers of surviving corn flea beetles are not known. More information on the corn flea beetle and Stewart's wilt can be found on the corn flea beetle fact sheet (<a href="http://www.ipm.uiuc.edu/vegetables/insects/corn\_flea\_beetle/index.html">http://www.ipm.uiuc.edu/vegetables/insects/corn\_flea\_beetle/index.html</a>) and at the University of Illinois' sweet corn disease nursery web site (<a href="http://sweetcorn.uiuc.edu/stewarts.html">http://sweetcorn.uiuc.edu/stewarts.html</a>).

Table 2. 2004 early season Stewart's wilt predictions.

	Average temperature December 2003 through February 2004	Potential for early season disease
St. Charles	25.2° F	Absent
Moline	27.2° F	Light
Kankakee	27.3° F	Light
Peoria	28.9° F	Light
Urbana	29.3° F	Light
Springfield	30.5° F	Moderate
Mt. Vernon	32.6° F	Moderate – Severe
Belleville	35.8° F	Severe
Carbondale	34.7° F	Severe

Kelly Cook (217-333-6652; kcook8@uiuc.edu)

## This issue's words of wisdom ...

- It's always darkest before dawn. So if you're going to steal your neighbor's newspaper, that's the time to do it.
- Always remember you're unique. Just like everyone else.
- Good judgment comes from bad experience, and a lot of that comes from bad judgment.
- A closed mouth gathers no foot.
- Duct tape is like the Force. It has a light side and a dark side, and it holds the universe together.
- No matter what happens, somebody will find a way to take it too seriously.
- Everyone seems normal until you get to know them.

.....

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

Extension Educators in Food Crop Horticulture				
Bill Shoemaker, St. Charles Res. Center	630/584-7254	wshoemak@inil.com		
Maurice Ogutu, Countryside Ext Center	708-352-0109	ogutu@uiuc.edu.		
Elizabeth Wahle, Edwardsville Center	618-692-9434	wahle@uiuc.edu		
Extension Educators				
Mark Hoard, Mt. Vernon Center	618-242-9310	hoard@uiuc.edu		
Suzanne Bissonnette, Champaign Center	217-333-4901	sbisson@uiuc.edu		
George Czapar, Springfield Center	217-782-6515	gfc@uiuc.edu		
Dave Feltes, Quad Cities Center	309-792-2500	dfeltes@uiuc.edu		
Russel Higgins, Matteson Center	708-720-7520	rahiggin@uiuc.edu		
Campus-based Specialists				
Mohammad Babadoost, Plant Pathology	217-333-1523	babadoos@uiuc.edu		
Raymond Cloyd, Greenhouse insects	217-244-7218	rcloyd@uiuc.edu		
Kelly Cook, Entomology	217-333-6651	kcook8@uiuc.edu		
Mosbah Kushad, Fruit & Veg Production	217-244-5691	kushad@uiuc.edu		
John Masiunas, Weed Science	217-244-4469	masiunas@uiuc.edu		
Chuck Voigt, Veg Production (& herbs)	217-333-1969	c-voigt@uiuc.edu		
Rick Weinzierl, Entomology	217-333-6651	weinzier@uiuc.edu		

### Return Address:

Rick Weinzierl Department of Crop Sciences University of Illinois 1102 South Goodwin Ave. Urbana, IL 61801

