UNIVERSITY OF ILLINOIS EXTENSION
College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

Vol. 18, No. 4, May 10, 2012
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.

In this issue ...

Bill Shoemaker to Retire

Bill Shoemaker, currently the Superintendent and Senior Research Specialist at the University of Illinois St. Charles Horticultural Research Center is retiring at the end of next month after 30 years with the University of Illinois. A reception in his honor is scheduled for Thursday, June 7, 2012, from 3:00 to 7:00 p.m. at the University of Illinois Kane County Extension Office, 535 S. Randall Rd., St. Charles. Bill's research and outreach programs in fruit and vegetable production have been based in northern Illinois for more than twenty years. He currently is the Regional Viticulture Specialist for the Illinois Grape Growers & Vintners Association and conducts work in grape breeding, evaluating cultivars for winter hardiness, and investigating IPM and training systems for optimizing wine production.
Bill has been very supportive of the Master Gardener program with his pumpkin production as well as space and resources for the Kane County Inmate Garden. Please join us to acknowledge and thank Bill for his years of service and to wish him well in his retirement. We'll have light refreshments and stories to tell as we look back on his career with Extension. If you are unable to attend but would like to have an email or card given to Bill, please address your card to Ruth Thompson, 535 S. Randall Rd, St. Charles, IL 60174. Gift checks can be made out to Ruth Thompson and sent to the same address. Please rsvp for the reception to rathomps@illinois.edu or call 630-584-6166.

Upcoming Programs

- **SW Illinois Orchard Twilight Meeting, May 24, 2012.** Eckert's Grafton Farm, 20995 Eckert Orchard Lane, Grafton, IL. Program begins at 6:00 p.m. For more information contact Andrew Holsinger at 217-532-3941 or aholsing@illinois.edu.
- **Quincy-area Market Farm Tour, May 29, 2012,** 8:00 a.m. – 2:00 p.m. Meet at 8:00 a.m. at Mill Creek Farm, 2833 S. 48th, Quincy at 8:00 a.m. Mike and Theresa Roegge operate the farm, which has outdoor and high tunnel production. Their produce is sold through a stand on the farm as well as some wholesale. Second stop will be at Terripin Farms, 3011 N. 90th, Fowler. Brad and Jessica Whiston and Josh Huffman grow all

their produce outdoors, with the majority on plastic. They market through two CSA's as well as several Farmers' Markets. The last tour stop will be at Lubbert Farm, 1427 N. 2250th Avenue, Mendon. Chuck and daughter Beth grow organic produce, almost exclusively in four high tunnels. They market their produce via email and central pickup once per week. Registration is $10 per person to cover lunch. Register on line at http://web.extension.illinois.edu/abhps under "Market Garden Tour" on the right.

- **High Tunnel Workshop, June 11, 2012.** Workforce Careers Center, Lincoln Land Community College, 9:00 a.m. to 4:30 p.m. Mike Bollinger and local growers will cover developing a planting plan, planting, and management topics including insect and weed control and winter growing. Registration is $30. (A discounted rate of $50 will be charged to participants who sign up for this and the May 12 workshop listed above.) Registration includes a box lunch and copies of two books, *The Polytunnel Handbook* and *The Winter Harvest Handbook*. For more information and to register, see www.llcc.edu/greencenter or contact Julie Bates at julie.bates@llcc.edu or 217.786.2434. Hosted in conjunction with University of Illinois Extension and funded with the assistance of the Illinois Community College Board and the Illinois Department of Commerce and Economic Opportunity.
- **Illinois Summer Horticulture Day, June 14, 2012,** at Kuipers Family Farm near Maple Park, Illinois. Kuipers' Family Farm features a pick-your-own orchard and pumpkin shop, a bakery, a Barn Store, and many entertainment activities. For more information, see www.kuipersfamilyfarm.com or www.specialtygrowers.org. For reservations, use www.ilsthortsoc@yahoo.com or call 309-828-8929.

Regional Updates

In western Illinois … There was some hail damage on the evening of May 3 in west-central Illinois. Assessing the effects of hail damage can be challenging. Important factors include the amount of defoliation and stem or stalk injury caused by the hail stones relative to the growth stage of the crop. While hail damage can result in severe yield losses, most of the time the human eye perceives greater damage than truly exists. For now, keep watch and see how the plants progress over the next week.

Black cutworms are active throughout the area in corn. Scout all sweet corn fields, especially the ones that were planted early, were planted into "weedy' fields after burndown, and those on south facing slopes which received the most sunlight when moths were laying eggs. These three conditions present 'the perfect storm" for cutworm damage.

The area received between 2-3 inches of rainfall last week. Most growers were glad to see it. Everyone has enjoyed somewhat of a "break" and is ready to get back out in the fields.

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

Notes from Chris Doll

It is difficult to say where we are in this early, mixed-up season, but the current estimate is that fruit crops are about three weeks ahead of normal. Strawberries (matted row system) came in during the last week in April, and after several 90-degree days last week look like they are headed downhill instead of for normal maturity after May 20. The crop was good, in spite of the close calls on several frosty nights, and size has been good. With only the taste buds measuring sugar content, it seems low. During some discussions the thought was that fewer hours of sunshine during the shorter days of the early season could have had some effect.

Discussions in the area also include the estimated timing of harvest of other crops. Apparently there has been a reduction of about a week's worth of earliness, leaving the 3-week estimate on the books. It will take a fair amount of cool and cloudy weather to delay things to anywhere near average harvest dates. In the Back-40, Sunshine apricot is showing signs of color change, and Van cherries are swelling with a definite sign of ripening. The harvest dates from these trees in 2011 were May 30 and June 4. A very early peach variety in a local orchard is also showing signs of change.

Weather continues to cause concern, as a couple of hail events have caused considerable damage to the apple crop and to a lesser extent the peach crop. With the peaches that I have seen, most of the hail damaged fruits can be removed during hand thinning without reducing yield. One of the plasticulture strawberry fields was hit near peak harvest,

which makes for lots of damaged fruit. The surviving fruits have some spots and deformities and are suffering from loss of about 50 percent of the leaves.

This area has ample soil moisture, with inactivity in field crops for the past 7-10 days. Further south, it is drier, and some rain would be welcome. Although the moisture situation has been more than ample, no significant disease problems have been seen on fruit crops. Local orchards with mating disruption in place for codling moth and Oriental fruit moth appear to be in good shape too. Lesser peach tree borer moths were trapped last week. In looking at one hail damaged peach orchard, damaged scaffolds are showing gummosis and offer great sites for this insect, so treatments will be especially important.

During the course of a year, apple orchards show beauty at many times – while being well pruned, in full bloom, green and growing, and then when loaded with beautiful fruits. Another that I noticed this week is the sign of a good job of chemical thinning, with all the excess fruits on the bare soil beneath the tree. That is in contrast to the pretty site of all the thinned peaches on the ground after many hours and dollars of pole and hand thinning, but with a remaining full crop on the tree.

Young trees are growing nicely, and some time can be profitably spent in spreading some of the new shoots and doing the shoot removal needed for best tree development. Growers should be able to tell if the tree has sufficient nutrients for optimum growth, and if not, some additional fertilizer can be applied to foster better growth. In older trees, unwanted sprouts can be easily pulled at this season.

Thornless blackberries are now in full bloom and new canes are tall enough for tipping if needed for the type of trellis system. For the T-type trellised black raspberries, the same situation exists, and the tipping can be done either with the fingers or shears.

Chris Doll

Fruit Production and Pest Management

For growers whose orchards suffered total or near-total crop loss in the freezes about 4 weeks ago, tree management, disease management, and insect management should be modified to reduce some expenses usually needed to bring marketable fruit to harvest. Here are few considerations …

Caring for Trees that Lost Their Crop due to the April 11-12 Freeze

Damage from the April 11 and 12 freeze is extensive in some areas and not yet fully assessed. Perhaps the most significant impact of this cold wave is on the tree fruit industry throughout the Midwest and North East, because trees were either in bloom or already had small size fruits. Damage to the apple crop is more severe in the central and northern counties of Illinois. Some growers in central and northern counties are reporting near complete loss of fruits on most varieties, including Honeycrisp, Goldens, and Jonathans. Damage to peaches in western Illinois was very light, except on trees in poorly air-drained areas. In addition to damage to fruits, leaves were also damaged. Some leaves lost a sizable portion of their surfaces, while others were completely killed, especially on grapes.

Many growers are asking how to manage trees that have lost their crop and have damage to their leaves. Unfortunately, many fruit growers think that because the trees have no crop, it automatically means that they are going to grow vigorously, and so they tend to neglect them. Freeze damage does not affect the fruits only, it does affect the leaves and it also impacts the reserve carbohydrates if the damage occurs after fruit set. Damaged trees, especially among stone fruits, should be examined carefully for signs of leaf yellowing and treated accordingly. In apples, a dose of boron and other micronutrients such as zinc and manganese will help improve leaf efficiency and return bloom. A cup of balanced fertilizer will help apple trees with leaf damage. Avoid treating young trees with boron.

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

Fungicide Programs for Freeze-Damaged Apple and Peach Orchards

Apple and stone fruit crops are good in southern and western Illinois; there are some losses in northern Illinois, and the heaviest damage occurred in the east-central part of the state. Where a partial crop will still be marketed, even a light crop needs to be protected by a "normal" spray program, and registered fungicides are listed in the ***2012 Commercial Tree Fruit Spray Guide*** (http://www.hort.purdue.edu/fruitveg/2012ID168.pdf). For the orchards that have no crop, growers should focus on minimizing development of scab and powdery mildew on apples and powdery mildew and bacterial spot on peaches. The best approach is to scout each orchard and apply controls as needed.

Apples. Two major diseases that develop in spring in apple orchards in Illinois are scab and rust. Powdery mildew has been observed in some orchards, but it has not been a serious issue. Where primary scab was effectively controlled, no additional fungicide sprays may be necessary, except for cultivars that are highly susceptible to mildew. Also, rust diseases are controlled when scab is effectively managed.

Where scab lesions are present in trees with no crop and there is no need for mildew control, a single application of Captan at the maximum label rate in late May to mid-June will limit secondary spread of scab to new leaves. Secondary spread of scab in summer is often limited by hot weather. Temperatures above 85°F significantly reduce viability of conidia. However, if the weather stays cool and wet, further applications of Captan may be needed during June and July to slow secondary spread of scab, especially in vigorous trees where shoot growth may continue unabated. Where considerable leaf scab is evident in late summer, a fungicide spray in September can help to limit the spread of scab to the undersides of leaves during autumn. Preventing spread of scab during autumn can significantly reduce the amount of carry-over inoculum for next year. There is no need for 100% control of scab in an orchard with no crop, so long as the foliage remains reasonably healthy, it will be more cost-effective to control scab next year.

Apple trees also can tolerate some powdery mildew, so 100% mildew control is not essential. Nevertheless, for mildew-susceptible cultivars such as Ginger Gold, Cortland, Paula Red, and Rome, mildew sprays may be needed during summer to limit the amount of carry-over inoculum for next year. Sulfur is the cheapest fungicide for mildew control, and it should provide adequate protection for trees with no crop. Sulfur is easily removed by rain. Mildew-susceptible apple cultivars should be sprayed with sulfur at about 14-day intervals or after rains of one inch or more.

Peaches. Some peach orchards in central Illinois have lost their entire crops. Disease control may not be necessary in peach orchards with no crop. Control of powdery mildew and bacterial spots of leaves, however, may require fungicide applications. Powdery mildew could rapidly develop in susceptible cultivars, and spray treatments may be needed. Application of sulfur [e.g., Microthiol Disperss (80% sulfur) at 10 to 15 lb/A], at 14-day intervals, can control powdery mildew. Spray the trees as needed. Bacterial spot of peach is a serious disease in Illinois and will develop on leaves in moist conditions. Severe bacterial spot causes defoliation in susceptible varieties. If needed, the trees can be sprayed with copper at the rate of 0.25 - 0.50 lb copper per acre.

Mohammad Babadoost (217-333-1523; babadoos@illinois.edu)

Insect Management in Orchards with No Crop

On the same theme as the preceding articles, it's equally important to reduce insect management efforts and costs in orchards that will not produce a harvestable crop. As Mohammad noted, be sure to distinguish between "no harvest" and a "reduced harvest" that you still intend to market. If a 20-percent crop is to be sold, it requires pretty much the same insect management effort as a 100-percent crop; otherwise, insect damage and contamination will make even the small crop unmarketable. So, as you decide whether or not a very small crop is worth maintaining, be sure to factor in an essentially normal spray bill.

In any blocks or plantings of fruit crops where the crop will not be marketed, use the following guidelines to reduce insect management costs but still keep plants healthy and ready to be productive in 2013. Check the ***2012 Commercial Tree Fruit Spray Guide*** (http://www.hort.purdue.edu/fruitveg/2012ID168.pdf) for lists of insecticides for each pest, and scout and treat accordingly.

- Apples: Insects and related pest that remain a concern in the absence of a fruit crop include aphids (including woolly apple aphid), potato leafhopper, dogwood borer, San Jose scale, and Japanese beetle. European red

mite injury and white apple leafhopper injury are independent of the presence of fruit, but mite and white apple leafhopper outbreaks are far less likely where no insecticides or very few insecticides are used (they are secondary pests that cause problems when insecticides kill their natural enemies). Plum curculio, codling moth, leafrollers, and apple maggot are non-issues in the absence of fruit. These direct pests are the targets of most sprays applied after bloom, so an insecticide cover spray program is not needed. That said, a conventional cover spray program kills several insects – pests and nonpests – other than these primary pests (think of it as coincidental control or collateral damage), so where cover sprays are not applied routinely, it's necessary to scout for and control the creatures that can cause damage over the long term.

  - Aphids: Examine terminals for rosy apple aphids first and then green aphids at about 2-week intervals. Treat if more than 30 percent of terminals are infested and natural enemies are absent. Controlling woolly apple aphid generally is advised where infestations are observed on greater than 50 percent of pruning scars.
  - Scouting for white apple leafhopper is recommended at the time of normal petal fall and again in August, and treatment in fruit-bearing orchards is warranted if counts exceed 3 nymphs per leaf. Although WALH can have an impact on tree vigor and the following year's crop, greater infestations certainly can be tolerated in the absence of fruit (but no thresholds are available for this specific situation).
  - Scout for potato leafhopper beginning now, especially on young trees where vigorous growth is important to bring the trees into productivity. Even a few potato leafhoppers feeding on leaves of new shoots can cause curling of leaves and stunted growth, so control is warranted on young trees when potato leafhopper is simply observed as present. This insect is easy to control in apples with organophosphate, carbamate, or neonicotinoid insecticides; Imidan works well and is not very toxic to predaceous mites.
  - San Jose scale: Oil sprays applied before bloom were the primary and best steps for San Jose scale control, but an application of Esteem about 6-8 weeks after full bloom (again, timing is dependent on weather) might be considered in blocks where scale problems were severe last year. Use black electrical tape (sticky side out) wrapped around twigs or branches of problem trees to determine when crawlers are active … that's the time to treat.
  - Dogwood borer: Adults are clearwing moths similar to (but smaller than) peachtree borer and lesser peachtree borer; they lay eggs in burrknot tissue or the graft unions on clonal rootstocks such as M.7, M.26, etc., and in interstems. Larvae tunnel in the burrknot tissue and adjacent cambium, sometimes girdling trees. Flights usually begin in mid-May in southern IL and early June in the north, with flight peaks roughly 4 weeks later (all dates are of course weather-dependent, so this year they'll be earlier). Where traps are used to monitor flight, the best time for applying insecticides as trunk sprays to prevent larval damage is roughly a week after peak flight. Where traps are not used, trunk sprays generally should be used in mid-June in southern IL and early July in northern IL.
  - Japanese beetle: No surprises here … if beetles are defoliating trees from June through August to the extent that desired growth or vigor is compromised, control them.
  - European red mite: If an application of oil went on before bloom and growers do <u>not</u> use neonicotinoids (Assail, Calypso, and Clutch) or pyrethroids (Pounce, Asana, Warrior), it's unlikely that outbreaks will occur. Thresholds are 2.5 mites per leaf at petal fall, 5 mites per leaf in midsummer, and 7.5 mites per leaf by late July.

- Peaches: The list of creatures that can still be pests even in the absence of fruit is shorter in peaches: lesser peachtree borer, peachtree borer, San Jose scale, Japanese beetle, and European red mite (though as for apples, mite problems are unlikely if insecticides that kill predaceous mites are not used). In the absence of a crop, there is no reason to control plum curculio, stink bugs and plant bugs, or oriental fruit moth (unless oriental fruit moth is tunneling into so many shoot tips that it's reducing new growth enough to compromise next year's crop, and that's not likely).

  - Lesser peachtree borer flight usually is underway in southern IL and will start soon in central Illinois, and although it peaks a few weeks later, it often spans most of the summer, sometimes with a second peak in August. Peachtree borer flight may begin by early June, and there's one peak per season. Where control is needed, a trunk and lower scaffold branch spray of Lorsban 4EC about 1 week after lesser peachtree borer flight begins (or by mid-May in southern IL) provides control for up to 8 weeks. A trunk spray of Lorsban 4EC or a pyrethroid (including Pounce, Asana, or Warrior) provides

later season control of lesser peachtree borer and peachtree borer. Only one application of Lorsban is allowed per crop season.

- San Jose scale: As in apples, oil sprays applied before bloom were the primary and best steps for San Jose scale control, but an application of Esteem about 7-9 weeks after full bloom (again, timing is dependent on weather) might be considered in blocks where scale problems were severe last year. Use black electrical tape (sticky side out) wrapped around twigs or branches of problem trees to determine when crawlers are active … that's the time to treat.
- Japanese beetle: Same as above … if beetles are defoliating trees from June through August to the extent that desired growth or vigor is compromised, control them.
- European red mite: Again, much like in apples, if an application of oil went on went on before bloom and growers do not use pyrethroids (Asana, Pounce, Warrior, Baythroid, etc.) as cover sprays, it's unlikely that outbreaks will occur.

Rick Weinzierl (217-244-2126; weinzier@illinois.edu)

Low Seed Count in Many Apple Varieties

The windy and cold weather may have hampered seed set. Over the last few days I have been cutting apple fruitlets from Reds, Goldens, Gala, and Honeycrisp to determine seed set. Almost all of the fruits that I cut had at least one empty seed cavity, and some had as many as four. Seeds are the major source of hormones such as auxins, gibberellins, and cytokinins. These hormones are necessary for the initiation of cell division and progression of cell enlargement. They are also important stimulants of color formation. Studies on strawberry showed that when the 'seeds' are removed, while the fruit is still young, the fruit stopped growing and was misshaped. However, when strawberry fruits that have their seeds removed were coated with a lanoline paste containing auxin the fruits grew normally and developed red color. These findings clearly demonstrate the important role of the seed in fruit growth and development. The apple seed provides a healthy dose of these hormones that allow the fruit to grow normally. Fruits that are missing any number of their seeds are likely to be affected. The effect can be minimal if the fruit is missing one or two seeds, but fruits that are missing more than two seeds will likely be misshaped (lopsided), have poor color, and in severe cases may drop off the tree. In some crops fruits will develop normally even without seeds. Fruits that develop without seeds are called parthenocarpic. The pollination process stimulates the synthesis of these hormones and the growth of the fruit, even if the seed does not set. It was reported that an extract from apple seeds stimulated parthenocarpy in tomato fruits. Other studies suggested that some fruits will develop as though they are parthenocarpic even when pollen of a different species lands on the stigma. In apples, however, good seed set is required for optimum fruit growth. Fruit color and storage potential will likely be affected by the low seed count. There is very little you can do to reverse the process. Your only option is to hand thin smaller and misshaped fruits or sort them out after harvest.

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

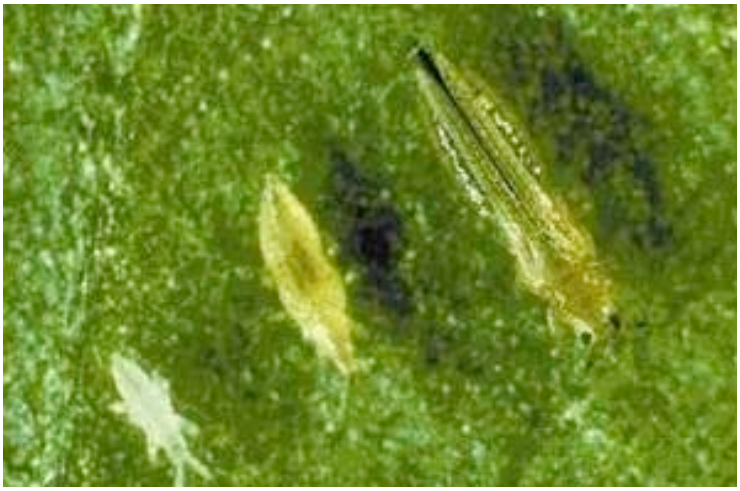
Enhancing Lateral Branching in Newly Planted Trees

Promalin may be used to enhance lateral branching and spur development in newly planted trees. Promalin at 0.5 to 1 pint per 5 gallons of water applied to young non-bearing trees will stimulate branching. Promalin treatment can also stimulate a second whorl of branching on the central leader in two-year-old non-bearing trees. Apply Promalin directly to the area where branching is desired, but avoid drenching the tree so as not to inhibit flower bud formation for the next year. If you don't have Promalin, you can enhance lateral bud formation on young trees, especially whips, by bending them at the tip to a 90 degree angle. The tree must be straightened to a vertical position when the wood starts to harden in early to mid-July.

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

Eastern Flower Thrips Arrival

The very warm southern flow that arrived in southern and central IL last week brought with it eastern flower thrips. Our codling moth and oriental fruit moth traps – with sticky white bottoms or liners – along the edge of the old seedling block of apples at Urbana were coated with hundreds of thrips each. Growers with strawberries still in early stages of bloom or brambles with flowers beginning or continuing to open should scout for thrips now.



Western flower thrips (closely related to eastern flower thrips)
(Photo from OMAFRA)

Rick Weinzierl (217-244-2126; weinzier@illinois.edu)

Degree-day Updates for Oriental Fruit Moth and Codling Moth

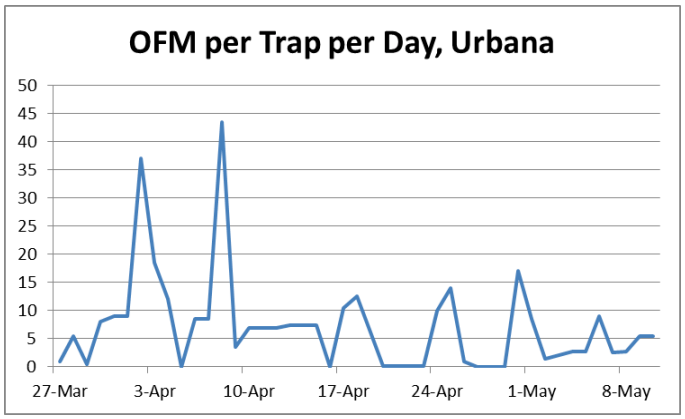
Biofix for **oriental fruit moth** at Urbana was March 24; for at least some orchards in southern to southwestern IL, the biofix date (beginning of consistent flight) was March 18. Based on a 45-degree F developmental threshold, degree-day accumulations through May 9 were approximately:

Oriental Fruit Moth

Location	Biofix Date	Degree-days (base 45F) from biofix through May 9
Carbondale	March 18	1007
Belleville	March 18	1088
Urbana	March 24	659

These accumulations suggest that second-generation flight is already underway in southern Illinois. Second-generation moths will lay eggs on developing peaches, and the larvae will tunnel into fruit. Mating disruption dispensers must be in place or cover spray programs must be underway to prevent infestations.

Oriental fruit moth flight has not been steady since the early biofix date at Urbana. The graph below illustrates the pattern of moth counts in traps placed in our unmanaged old seedling block of apples at the University of Illinois. The dates with no moth catches generally correspond to evenings when the temperature was too cold for flight. Still, all of the moth captures so far at Urbana represent moths that matured from pupae that overwintered (first generation flight).



Codling moth flight at Urbana has been underway (though light) since April 25; for at least some orchards in far southern Illinois the biofix date was March 30, and although there was a lag after initial captures in the Belleville area, it looks like a biofix date of March 25 is appropriate there. Based on these biofix dates, degree-day accumulations based on a 50-degree F developmental threshold look like so:

Codling Moth

Location	Biofix Date	Degree-days (base 45F) from biofix through May 9
Carbondale	March 30	604
Belleville	March 25	738
Urbana	April 25	220

These accumulations suggest that codling moth flight is almost over and egg hatch is over 80 percent complete in southern Illinois, but with the number of cold periods that occurred after flight began, it is likely that reproductive success for first generation was pretty low. I would appreciate receiving any grower reports of records from pheromone traps Degree-day accumulations at Urbana suggest that egg hatch is just beginning here.

Rick Weinzierl (217-244-2126; weinzier@illinois.edu)

Vegetable Production and Pest Management

Whiteflies

Phil Nixon, a University of Illinois Extension Entomologist, recently pointed out that populations of whiteflies, probably silverleaf whitefly / sweet potato whitefly, are noticeably greater than usual for this time of year. We usually see these insects build up slowly through the season after extremely low overwintering survival in the Midwest and from migrations from further south. Infestations are seldom noticeable until late summer when they commonly become numerous on tomatoes, peppers, cucurbits, and a few other vegetable crops. Early sightings this year probably are the result of the extremely mild winter. Whatever the reason, vegetable growers are advised to look for these insects and let us know if infestations build up early this season.

Silverleaf whitefly (Phil Nixon)

(Rick Weinzierl; 217-244-2126; weinzier@illinois.edu)

Less seriously: … some seriously bad puns …

- I changed my iPhone's name to Titanic … it's synching now.
- I know a guy who is addicted to brake fluid … but he says he can stop any time.
- Jokes about German sausage are the wurst.
- I stayed up all night to see where the sun went … then it dawned on me.
- I'm reading a book about anti-gravity … I just can't put it down.
- My lab report said I have type A blood … but it was a type-O.
- PMS jokes are not funny. Period.
- We're taking a class trip to the Coca-Cola plant … I hope there's no pop quiz.
- I tried to catch some fog … but I missed.
- What do you call a dinosaur with an extensive vocabulary? A thesaurus.
- I dropped out of communism class because of lousy Marx.
- The earthquake in Washington was obviously the government's fault.
- This girl said she recognized from the vegetarian club, but I'd never met herbivore.

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

Extension Educators – Local Food Systems and Small Farms		
Stephen Ayers, Champaign, Ford, Iroquois, & Vermilion counties	217-333-7672	srayers@illinois.edu
Deborah Cavanaugh-Grant, Logan, Menard & Sangamon counties	217-782-4617	cvnghgrn@illinois.edu
Kyle Cecil, Henderson, Knox, McDonough, & Warren counties	309-342-5108	cecil@illinois.edu
Laurie George, Bond, Clinton, Jefferson, Marion, & Washington counties	618-548-1446	ljgeorge@illinois.edu
Christopher Konieczka, Livingston, McLean, & Woodford counties	815-842-1776	cmkonie@illinois.edu
Paul Mariman, DeWitt, Macon, & Piatt counties	217-877-6042	pmariman@illinois.edu
Matt Montgomery, Fulton, Mason, Peoria, & Tazewell counties	309-547-3711	mpmontgo@illinois.edu
Ellen Phillips, Boone, DeKalb, & Ogle counties	815-732-2191	ephillps@illinois.edu
John Pike, Franklin, Jackson, Perry, Randolph, & Williamson counties	618-993-3304	jpike@illinois.edu
Mike Roegge, Adams, Brown, Hancock, Pike & Schuyler counties	217-223-8380	roeggem@illinois.edu
David Shiley, Coles, Cumberland, Douglas, Moultrie & Shelby counties	217-543-3755	dshiley@illinois.edu
James Theuri, Grundy, Kankakee, & Will counties	815-933-8337	jtheu50@illinois.edu
Extension Educators – Horticulture		
Richard Hentschel, DuPage, Kane, & Kendall counties	630-584-6166	hentschel@illinois.edu
Andrew Holsinger, Christian, Jersey, Macoupin, & Montgomery counties	217-532-3941	aholsing@illinois.edu
Sonja Lallemand, Franklin, Jackson, Perry, Randolph, & Williamson counties	618-687-1727	lalleman@illinois.edu
Elizabeth Wahle, Bond, Clinton, Jefferson, Marion, Madison, Monroe, St Clair, & Washington counties	618-650-7050	wahle@illinois.edu
Extension Programs for Farm to School		
Julia Govis, Statewide Extension Program Coordinator, Farm to School	630-955-1150	jgovis@illinois.edu
Horticulture Research-Extension Specialists at our Research Stations		
Jeff Kindhart, Dixon Springs Agricultural Center	618-695-2770 618-638-7799 (cell)	jkindhar@illinois.edu
Bill Shoemaker, St. Charles Research Center	630-584-7254	wshoemak@illinois.edu
Campus-based Extension Specialists		
Mohammad Babadoost, Plant Pathology	217-333-1523	babadoos@illinois.edu
Mosbah Kushad, Fruit & Vegetable Production	217-244-5691	kushad@illinois.edu
John Masiunas, Weed Science	217-244-4469	masiunas@illinois.edu
Chuck Voigt, Vegetable Production (& herbs)	217-333-1969	cevoigt@illinois.edu
Rick Weinzierl, Entomology	217-244-2126	weinzier@illinois.edu

Return Address:

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