

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 email address above.

For your calendar ... June 16, 2006 – Illinois Summer Horticulture Field Day will be held at Boggio's Little Mountain Orchard near Granville, IL; and September 8, 2006 -- Illinois Pumpkin Field Day will be held at the University of Illinois Vegetable Research Farm near Champaign, IL.

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

Regional Updates

In the Southern Region ... It's green in Southern Illinois, and temperatures soared into the 90's the second week of April. The third week of April had temperatures back down to normal spring temperatures. The first sweet corn plantings are just coming up in the southern region, and most growers have two to three successive plantings in the ground. In the Gallatin County area, early tomatoes and green onions have also been planted, and up in the Madison County area growers are planting peas, okra, horseradish, and beets.

With a few exceptions, most tree fruit growers came through the March 21st freeze OK. One grower in the Calhoun County area told me even the dead peach branches had blooms this year. Needless to say, bloom thinning is ongoing in most of the peach growing area. The apple crop overall looks good again this year, with most varieties showing a full bloom. The grapes are breaking bud and the strawberries have fruits visible low in the plants.

The Berry Patch in Livingston, IL is going out of business and will have a public auction on June 3rd. The auction bill can be located online at www.a-nauctions.com.

A twilight meeting has been scheduled for tree fruit growers on May 18th. The meeting will start at 5:30 and will be hosted by Tom Ringhausen at his orchard just off Batchtown Road in Calhoun County. For more information contact Elizabeth Wahle at 618-692-9434 or wahle@uiuc.edu. Several meeting have been tentatively scheduled so I'll go ahead a list what I have so far. See my website for details as they become finalized: http://web.extension.uiuc.edu/regions/hort/

May 13, 2006—Grape Workshop, Trellis Installation. The location is tentatively set for the Pittsfield area.

May 26, 2006—Mississippi Valley Peach Orchard Tour will be hosted by Bader Orchard. Bader's is located near Campbell, MO, in Dunklin County.

June 16, 2006—Summer Field Day will be held at Boggio's Little Mountain Orchard in Granville, IL.

September 8, 2006—Illinois Pumpkin Field Day will be held at the University of Illinois Vegetable Research Farm in Champaign, IL.

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

At the Dixon Springs Ag Center ... Plasticulture strawberries are looking very promising ... growers are reminded to scout for eastern flower thrips (see the 2006 Commercial Small Fruit and Grape Spray Guide for thresholds and pesticide recommendations). Another reminder ... pay close attention to fungicide rotation to avoid resistance development. We anticipate harvest to begin around May 1.

Blueberries are in full bloom and have been fertilized. Growers with high pH should fertilize with ammonium sulfate, while growers with a pH of 5.2 or below should consider using urea. Regardless of the fertilizer form you use, nitrate forms should be avoided for use on blueberries.

We have seen cases of asparagus beetle in southern Illinois, so be on the lookout!

It appears that thinning will be quite necessary for the southern Illinois apple crop. Apple trees at the station are being sprayed with streptomycin for fire blight control. We anxiously await any information readers could share regarding their experiences with organic methods of fruit thinning.

Early varieties of tomatoes in high tunnels are about the size of a dime, with all varieties blooming. Some growers in southern Illinois have seen emergence on their early-planted sweet corn. Forecasts for dry weather this week will bring much additional field work for southern Illinois vegetable growers.

Jeff Kindhart (618-695-2444; jkindhar@uiuc.edu) and Bronwyn Aly (618-695-2444; baly@uiuc.edu)

In northern Illinois ... warm weather during the preceding week led to opportunities for planting. Soil temperatures were at 55°F at 4 inches, so a number of crops could be planted, including onions, sweet corn, cole crops and dormant nursery stock. Tillage activities were vigorous and signified a real start to the growing season. Some asparagus is emerging so even a little harvest is taking place.

Fruit trees are entering budbreak. Some are well past it, so it's clearly time to get early sprays on. Grapes are going through budswell now. Flea beetles may be feeding on swelling buds, so it's a good time to scout. Brambles are showing budswell activity and everbearing plantings are up and growing.

Temperatures are forecasted to continue to be warm, but rainfall may interrupt field activities. Widespread rains over the weekend included heavy rains, with most locations getting greater than 1 inch. Midweek rains forecasted may mean not enough lapsed time for field drying, putting an end to most planting activities.

Greenhouses are probably nearly bursting, but consumers are buying, even though we're still a month away from the average frost-free in most areas of northern Illinois. Maybe it will be a good year for repeat sales. Maurice is due back from Kenya soon, so next issue, look for a good word from him.

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

2006 Food Crop Research at St Charles: Another season is upon us, and plans for food crop research at St Charles are unfolding. A number of projects are planned, and several researchers are involved. Following are descriptions of some of those projects.

Pumpkin weed control has been a primary focus for St Charles for at least a decade. Dr Bill Whiteside, retired Extension Educator, has persistently pursued answers to that challenge and will continue to do so in 2006. He and I have both come to believe that growers would prefer to use pre-emergence herbicides as their base-line for weed control, if they could depend on the performance of those herbicides. We will continue then to evaluate pre-emergence herbicides in pumpkins in one trial. He has decided to evaluate separately Chateau herbicide across several types of pumpkins, including processing types. We'll also look at strategies for using Select Max and Sandea for post-emergence weed control.

Dr. Rick Weinzierl will be looking at several insecticides for efficacy against corn earworm and western bean cutworm, a potential new pest in northern Illinois sweet corn. Dr Maurice Ogutu will continue his work evaluating different colors of plastic mulches in tomatoes, melons and peppers. He also has a planting of grain rye winter cover crop for evaluation of weed control and improved fruit quality.

Mineral nutrition work in vegetables will be prominent this year. A field that has had no nitrogen for 2 seasons will be used to evaluated nitrogen fertilization levels in several crops, including peppers, melons, cabbage, sweet corn and snap beans. Both rates and timing will be evaluated. An unusual nutrition project will be continued in 2006 as a soil amendment product will be evaluated for timing of application, successive loading rates, residual impact and potential in a greenhouse soil mix. The product has shown both promise and problems, and this year's projects should sort some of them out.

A trial of tomato varieties is planned. This trial will include some new material from the breeding program at the University of Florida, as well as some of those cultivars which have performed well at St Charles in recent years. Another trial being planned is a cross-state trial of vegetable varieties and cultural systems. It will compare tomato and pepper varieties grown in conventional systems, under best management practices, or in organic systems. This trial will take place at St Charles, Urbana and Dixon Springs.

Grape research will again expand at St Charles in 2006. Currently there are two grape trials in the ground, a small breeding program and a comparison of trellis systems for hardy wine grapes. A large vineyard of Frontenac will be planted this year to accommodate a need for a standard vineyard for future cultural studies. This planting will be used for two years to evaluate stand establishment techniques for hardy wine grapes, including grow tubes, plastic mulches, starter fertilizers and training systems. It will also be used to evaluate the potential for specialty crops (tomatoes, melons, snap beans) to be used for offsetting the establishment costs for vineyards, looking for synergies and incompatibilities. It should be a busy season at St Charles. Any volunteers?

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

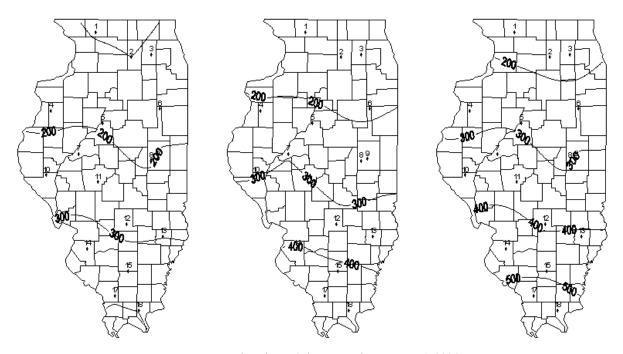
Degree-Days

Beginning with this issue, this newsletter will post degree-day accumulations at weather stations in the Illinois State Water Survey WARM data base, using the Degree-Day Calculator site on the University of Illinois IPM site (http://www.ipm.uiuc.edu/degreedays/index.html). I'll post only the degree-day accumulations and projections based on a 50-degree F developmental threshold and a January 1 starting date, although in articles focusing on specific pests I will include degree-day information based on other thresholds and starting dates when appropriate (including western bean cutworm, codling moth, oriental fruit moth, and others). In each issue I'll include maps and tables that present degree-day accumulations through the day before the publication date of that issue, along with historical averages and projections for 1 and 2 weeks into the future. For information on specific insect pests, including apple maggot, bean leaf beetle, black cutworm, codling moth, western corn rootworm, European corn borer, oriental fruit moth, peachtree borer, San Jose scale, squash vine borer, and stalk borer, use the listing available at http://www.sws.uiuc.edu/warm/pestdata/sqlchoose1.asp?plc=#. The degree-day calculator is available as a result of a joint effort of extension entomologists (primarily Kelly Cook) and Bob Scott of the Illinois State Water survey. If you have questions about how to use the site, contact me or Bob Scott (rwscott1@uiuc.edu).

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

Degree-day accumulations, base 50 degrees F, starting January 1.

Station	County	Base 50F DD	Base 50F DD	Base 50F DD	Base 50F DD
		Jan 1 – April 17	Jan 1 – April 17	Jan 1 – April 24	Jan 1 – May 1
		Historic Average	2006	(Projected)	(Projected)
1. Freeport	Stephenson	125	95	127	166
2. Dekalb	Dekalb	147	100	134	176
3. St. Charles	Kane	137	108	139	174
4. Monmouth	Warren	183	170	210	256
5. Peoria	Peoria	201	190	235	286
6. Stelle	Ford	170	142	182	228
7. Kilbourne	Mason	263	245	296	352
8. Bondville	Champaign	209	186	229	278
9. Champaign	Champaign	217	221	265	315
10. Perry	Pike	257	244	294	346
11. Springfield	Sangamon	243	252	303	359
12. Brownstown	Fayette	295	263	321	382
13. Olney	Richland	295	298	353	412
14. Belleville	St. Claire	346	349	409	472
15. Rend Lake	Jefferson	362	353	419	488
16. Fairfield	Wayne	332	Missing	Missing	Missing
17. Carbondale	Jackson	372	395	457	523
18. Dixon Springs	Pope	400	399	467	538



Degree days, base 50 degrees F, since January 1, 2006. Left: January 1 – April 17; center: January 1 – April 24 (projected); and right: January 1 – May 1 (projected).

Notes from Chris Doll

As of April 14, another early spring has pushed phenological developments very rapidly. High temperatures of 91 degrees on the 14th made it seem like summer. Apples are in full bloom to petal fall and a few split shucks have been seen on peach. Dry weather has alleviated some of the concerns about apple and peach scab and fire blight, but potential for spring storms and April showers deem that diligence be used. The trap line has not caught any CM or TABM, but the OFM count began on the 6th and was very high on the 14th.

The heavy bloom of peach is now history, and apple bloom reports show considerable variation between orchards and within orchards. Generally, if pollination is good, there will be a good crop except on some biennial varieties that were overloaded and drought-stressed last year. But one of the variations I saw last week was that some dry areas had return bloom and some areas with better moisture were blank. Another variation was the absence of flowers in the top of 20-year-old Jons/MM111 and in another block of mature Spur Reds/M7. And some Fuji blocks surprised a couple of growers with good return bloom following good crops in 2005. As reported earlier, trees on both B9 and M9 generally had a good return bloom. Petal-fall thinning spray time is close in the south for anyone using it, and it is suggested especially for Honeycrisp and Fuji. The variable tree-to-tree bloom on Reds, Goldens and Gala will cause some stress to spray operators this spring, but with the warm bloom period, thinning should be needed.

The timing for the first Apogee spray for fire blight will be past in many downstate orchards by the time this is printed. New shoot growth is now 1-2 inches in the Back-40, and growth will continue until it cools off. The 8-ounce rate has been fairly successful in local orchards in the past couple of years, followed by a second and third treatment.

Matted-row strawberries have started to bloom and will need fungicide treatments for Botrytis and scouting for thrips.

Chris Doll

Fruit Production and Pest Management

Control of Early-Season Apple Diseases

Fire blight of apples. With existing high temperatures, rains, and frequent storms, fire blight of apple will likely develop in apple orchards in Illinois during this growing season. Fire blight is one of the most important diseases of apples and pears in Illinois. Apple trees need to be sprayed for control of this disease at silver tip and during bloom. At silver tip, a Bordeaux mixture or a fix copper spray is effective in reducing initial inoculum, which oozes out of the cankers developed previous year. Using a dilute Bordeaux spray of 8 lb copper sulfate, 8 lb spray lime, and 1 gallon miscible superior oil per 100 gallons of water is recommended. Do not apply copper compounds after _-inch green leaf stage or when drying conditions are slow, as severe injury can occur. There are several fixed copper fungicides registered for use on apple. Fixed copper can be mixed with oil. However, never combine copper sulfate alone with dormant oil.



During bloom, application of an antibiotic (e.g., streptomycin) is needed to control blossom blight caused by the fire blight bacterium. Blossom infection is aggravated by showers which splash the bacteria. Apply streptomycin at 0.5 lb (or 0.25 lb plus 1 pt adjuvant Regulaid) per 100 gal dilute. The effectiveness of streptomycin can be increased by including the adjuvant Regulaid at the rate of 1 pint per 100 gal tank mix. Streptomycin remains effective for 3 to 5 days. Confidence in using streptomycin can be improved by using the computer program (MARYBLYT). Streptomycin is not recommended for use after petal fall, unless there is a serious storm causing damage in trees. Not more than four applications of streptomycin per season should be used. For more information on fire blight of apple, consult the "Illinois Commercial Tree Fruit Spray Guide 2006" (http://www.extension.iastate.edu/Publications/PM1282.pdf). Also, detailed information on fire blight can be found at: http://www.ag.uiuc.edu/%7Evista/abstracts/a801.html and http://wee-fruit.cropsci.uiuc.edu/Diseases/Fire%20Blight.htm,

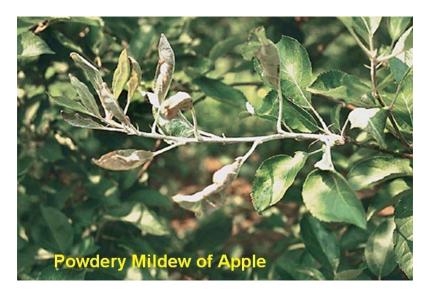
Apple Scab. Scab is a very serious disease of apples in Illinois. Control of early season scab (primary scab) of apple is essential. The first spray should be (should have been) applied at green tip. Primary scab spores are mature and disseminated at early bloom. There are several fungicides (i.e., Topsin-M, captan, mancozeb, Polyram, Syllit, Vangard, Scala,...) that effectively control primary apple scab. For more information on control of apple scab, consult the 2006 Commercial Tree Fruit Spray Guide (http://www.extension.iastate.edu/Publications/PM1282.pdf). Also, additional information on apple scab is available at: http://www.ipm.ucdavis.edu/PMG/r4100411.html.





Powdery Mildew of Apple. Powdery mildew control programs should be started at the tight-cluster stage. The fungicides Bayleton, Nova, Rubigan, Procure, Sovran, Flint, and Pristine can be used to control powdery mildew of apples. These fungicides are also effective against apple scab. But, all of these fungicides are prone for development of resistance in the causal pathogens. Therefore, SI fungicides (Nova, Rubigan, or Procure) should be used in combination (tank-mixed) with a protectant fungicide such as captan, mancozeb, Polyram, or Ziram. Sovran, Flint, and Pristine (strobilurin fungicides) are used alone to control powdery mildew and scab of apple. However, due to the risks of fungicide resistance development in the scab fungus, they should be tank-mixed with a protectant fungicide as well. For more information on control of powdery mildew of apple, consult the 2006 Commercial Tree Fruit Spray Guide

(http://www.extension.iastate.edu/Publications/PM1282.pdf). Additional information on powdery mildew is also available at: http://extension.usu.edu/plantpath/fruit_diseases/fd_apple_pwdymil.htm and http://www.ipm.ucdavis.edu/PMG/r4100311.html.



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

Notes on fruit insects

Dogwood borer: In the most recent issue of Scaffolds, Cornell University's newsletter on apples, Art Agnello pointed out that a coarse spray of Lorsban directed at trunk burr knots between half-inch green through petal fall is the most effective tactic for controlling this insect (which can be a serious problem in dwarf plantings).

Lesser peachtree borer: Traps should be hung in the next week or so for this insect in peaches. Lorsban remains among the most effective product for use against this insect, with application recommended at 7 to 10 days after traps begin to capture adults (clearwing moths that resemble wasps). Direct applications to the trunk and lower portions of scaffold branches. Alternatively, using mating disruption products such as Isomate LPTB can provide effective control. This is a topic that was covered in some detail during winter meetings in southern Illinois, though it's a little late to begin planning on using this approach if you've not already investigated it. I'll have demonstration blocks treated using mating disruption in 2 orchards in southwestern Illinois this season.

Codling moth: Sissy Erbacher of Eckert's at Belleville reported captures of a total of 3 codling moths in 13 traps by April 15; this isn't significant or consistent enough to represent a biofix, but one might anticipate a biofix within the next 10 days or so. Remember, traps should be in place by bloom, and insecticides for codling moth control should begin around 150 to 240 DD after biofix ... labels for newer products with activity against eggs (including Assail, Calypso, and Clutch) may stress application around 150 DD; Guthion or Imidan should be applied at 240 DD.

Reminders: Scout for flea beetles and cutworms on swelling and emerging buds of grapes, scout for eastern flower thrips on strawberries; make the always necessary insecticide applications to peaches and apples at petal fall for plum curculio (and often for tarnished plant bugs and stink bugs, especially in peaches). **Guthion's** use on peaches ends with this season.

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

Fruit-thinning Challenges

More on fruit thinning, but first a note on apple bud development in Champaign. As of <u>April 10</u>, 2006 ... 'Red Delicious' was at _-inch green, 'Golden Delicious' was at _-inch green, 'Gala' – was at tight cluster, 'Fuji' was at _-inch green, and 'Honeycrisp' was at _- inch green.

Thinning recommendations:

As I explained in the previous issue, apple thinning is not an exact science. Many factors have to work together in order for the thinning chemical to give its best response. How aggressive you should be with your thinning program will depend on the variety, conditions before and after you apply the chemical, and the crop load last year.

I have listed four scenarios that you may consider when thinning apples.

- Conservative or mild thinning: Apply 2.5 to 10 ppm NAA at 9 to 10 mm fruit size. Another option is to apply a 1.0 pint of Sevin XLR at the same fruit size. This program can be applied on easy-to-thin cultivars or when the weather is cloudy.
- Moderate thinning: Apply 5 ppm NAA plus 1 pint of Regulaid. Or apply 1.5 pint Sevin XLR or 1.5 lb Sevin 50W plus 24 oz of Accel at 8 to 9 mm fruit size.
- Aggressive thinning. Apply 1.0 lb Sevin 50W or 1 pint Sevin XLR plus 1 pint of oil plus 48 oz of Accel.
- Very aggressive thinning. Use 2 lb Sevin 50W or 2 pints Sevin XLR, plus 2 quarts of oil, plus 48 oz of Accel. Apply when fruit diameter is 10 to 15 mm. The aggressiveness of this program will be lessened as the fruit increases in size. This program will cause severe drop in easy to thin cultivars even as a drift.

All of the above thinning programs must be applied as dilute sprays of no less than 200 gallons per acre. Concentrated sprays are ineffective for thinning. Use tree-row volume when possible.

Please pay attention to fruit size when you thin. NAA works much better when fruit size is 8 to 9mm, and Sevin works better when the fruit size is 9 to 10 mm. For both NAA and Sevin, avoid waiting until the fruit size exceeds 14 mm. If the fruit got too big too fast before you were able to thin them, then your other option is to wait until the fruit size reaches 18 mm, then use Ethrel at 1 pint per acre dilute.

Fruit size on any cluster will vary considerably (see the photo below). King fruits could be more than twice the size of the smallest fruit. So don't guess the fruit sizes or select the largest or smallest fruit, use a caliper or a ruler that has the sizes punched into it to measure the precise fruit size. Collect about 15 to 20 clusters from at least five trees of each variety. Break the clusters into individual fruits and place them in a brown paper bag. Randomly pull one fruit at a time from the bag and measure its diameter. Stop when you reach fifty fruits. Add all the diameters of all the fruits and divide by fifty. That should give you the average fruit diameter that you will use for thinning. Measure each variety separately since varieties will differ in their fruit size.



Use the following to test if the thinner that you applied has worked or not. On the same day that you apply the thinner, select about five to ten fruits. Cut the bottom half of the fruit off leaving the rest attached to the tree. When these half fruits drop off, then the same proportion of the rest of the fruits that you treated with the thinner should also drop. Fruit drop usually occurs at about 8 to 10 days after you spray the trees. Some fruits will hang on the tree for a while before they drop naturally. To make sure that they drop, select a 2- to 3-inch diameter limb with a good fruit set and shake it vigorously. If the thinner worked properly then only one to two fruits per cluster should stay attached while the others should drop. If most of the clusters have 3 or more fruits, then you should consider

adding another thinning spray. NAA will not work at this time since the fruit diameter will be larger than 9 mm. Sevin plus some oil or Accel will work better or you may wait until the fruit reaches 18 mm then apply ethrel.

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

Vegetable Production and Pest Management

Plan Ahead to Avoid Pesticide Drift

In agriculture, pesticides serve as important tools to protect crops from pests. However, every crop has a neighboring crop that may be sensitive to those pesticide -- yield loss, long term damage to perennial crops, illegal residues, carry-over damage to the next season's crop, loss of organic certification, bee kill, and exposure of field workers are just a few of the potential outcomes resulting from pesticide misapplication often occurring as drift. When pesticides are applied, the person applying them is responsible for following label directions including using techniques that reduce drift. For more detailed information on how to reduce the effects of drift, go to: http://www.specialtygrowers.org/releases/ReducingPesticideDrift.pdf.

When pesticide drift is suspected, you should try to eliminate other possible causes for the damage. There are many things that can cause plant damage. If the damage appears to be pesticide drift, then contact the applicator to obtain as much information as possible and hopefully reach a settlement. If the cause of the damage is unclear or the parties won't work together, a formal complaint and/or lawsuit may be necessary. The Illinois Department of Agriculture (IDOA) is responsible for investigating pesticide drift and enforcing pesticide laws. University of Illinois Extension Educators and Specialists may be able to provide valuable help with diagnosing injury symptoms, but they are not an official part of the complaint process. A drift complaint begins with calling the IDOA Bureau of Environmental Programs at 1-800-641-3934 (voice and TDD) or 217-785-2427 and requesting a complaint form. Complaints must be received by the IDOA within 30 days of the incident or within 30 days of when the damage was first noticed. Complaints filed after that period of time will be kept on record, but no administrative action can be taken.

Once a complaint is filed with the Department, a field investigator is assigned to the case. In most cases, the inspector will interview the complainant and inspect the site. Various types of samples, such as plants, water or soil, may be collected for analysis. The investigator may also interview applicators in the area, examine pesticide records, and collect weather data in an attempt to determine the nature and cause of the damage. The field investigator's job is to remain neutral and collect evidence and information. The field investigator will submit a report of his or her findings. The field investigator makes no decision on whether or not drift injury occurred. The field investigator submits all the information collected, and Illinois Department of Agriculture administrators, who will make a decision on whether or not a pesticide misapplication occurred, review it.

Both the applicator and the complainant will receive written notification if the department finds a violation and takes enforcement action. Penalties range from advisory or warning letters to monetary penalties of \$750 to \$10,000, depending on the type and severity of the violation. Any monetary penalties go to the IDOA and not to compensate you for the drift injury. Penalties are determined through a point system defined in the Illinois Pesticide Act. Even if a violation of the Illinois Pesticide Act cannot be substantiated, both the complainant and the alleged violator will be notified in writing of the complaint's status.

The department's role in pesticide misuse investigations is limited to determining whether a violation of the Illinois Pesticide Act has occurred. The IDOA cannot help complainants recover damages. Civil litigation or insurance settlements are the responsibility of the complainant and can take years to settle.

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

Black cutworm update

During the last 2 weeks, we have had several reports of black cutworm moths caught in pheromone traps. Spring flights are in full swing, with moth captures reported in all areas of the state. Several counties have already recorded intense captures of black cutworm moths this season (9 or moths caught over a 2-day period), with the potential of several more counties to

report intense captures in the next week. Crawford, Ogle, Piatt, Pulaski, and Whiteside counties have all recorded significant moth flights this week. Dates of significant moth flights and projected cutting dates (in field corn or sweet corn) are listed below.

County	Date of Significant Capture	Projected Cutting Date
Pulaski	April 5	May 1
Piatt	April 15-16	May 16
Crawford	April 15-16	May 12
Ogle	April 17	May 23
Whiteside	April 17	May 23

Degree days can be an effective tool to help determine when to start scouting for black cutworm larvae. Degree-days can be used to predict larval development and when the first cutting of plants may begin. The accumulation of degree-days begins when a significant (or intense) moth flight occurs. After an intense capture is recorded, we can calculate degree-days to project when black cutworm injury, specifically cutting of corn plants, will occur. Black cutworm larvae are expected to begin feeding on and cutting corn plants with the accumulation of approximately 300 degree-days (base 50°F) after an intense capture occurs. Just as another reminder, if you are monitoring a pheromone trap, you can predict cutting dates in your area by using the Degree-Day Calculator found on the IPM (http://www.ipm.uiuc.edu/degreedays/) and WARM (http://www.sws.uiuc.edu/warm/pestdata/) websites.

It's important to scout fields that are especially attractive for egg-laying. Fields or areas of fields in which early-season weeds were growing at the time moths flew into the area are at a higher risk than weed-free fields. If tillage or herbicides eliminate weeds 1 to 2 weeks before planting, any black cutworms that had been present probably starve to death. The presence of weeds only a few days before planting increases the likelihood of cutworm damage if larvae are present in the field. Begin watching emerging seedlings carefully for early signs of cutworm feeding (pinholes in the leaves) and for plants that have been cut off by larger larvae. View the black cutworm fact sheet (http://www.ipm.uiuc.edu/fieldcrops/insects/black_cutworm.pdf) for more information on black cutworm injury.

Kelly Cook (217-333-4424; kcook8@uiuc.edu)

Words of Wisdom

As graduation nears, students are about to face new experiences ...

(From Comedy Central...) You know you're out of college when...

- Your salary is less than your tuition was.
- You keep more food than beer in the fridge.
- Mac & Cheese no longer counts as a well-balanced meal.
- 8:00 a.m. is not early.
- You learn that "bachelor" is a nicer term for a jackass.
- "Extended childhood" only really pertains to your salary, which is a little less than your allowance used to be.
- You start watching the weather channel.
- You go from 130 days of vacation time to 7.
- You stop confusing a 401K plan with 10K run.
- You go to parties that the police don't raid.
- You don't know what time Wendy's closes anymore.

University of Illinois Extension Specialists in Fruit Production and Pest Management

Extension Educators in Food Crop Horticulture					
Bill Shoemaker, St. Charles Res. Center	630/584-7254	wshoemak@inil.com			
Maurice Ogutu, Countryside Extension Center	708-352-0109	ogutu@uiuc.edu .			
Elizabeth Wahle, Edwardsville Extension Center	618-692-9434	wahle@uiuc.edu			
Bronwyn Aly, Dixon Springs Agricultural Center	618-695-2444	baly@uiuc.edu			
Jeff Kindhart, Dixon Springs Agricultural Center	618-695-2444	jkindhar@uiuc.edu			
Extension Educators in IPM					
Suzanne Bissonnette, Champaign Extension Center	217-333-4901	sbisson@uiuc.edu			
George Czapar, Springfield Extension Center	217-782-6515	gfc@uiuc.edu			
Dave Feltes, Quad Cities Extension Center	309-792-2500	dfeltes@uiuc.edu			
Russell Higgins, Matteson Extension 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			
Mosbah Kushad, Fruit & Vegetable Production	217-244-5691	kushad@uiuc.edu			
John Masiunas, Weed Science	217-244-4469	masiunas@uiuc.edu			
Chuck Voigt, Vegetable Production (& herbs)	217-333-1969	cevoigt@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

