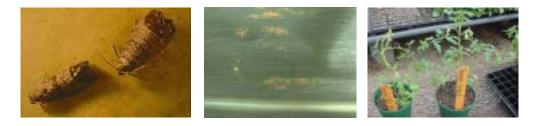


College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

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"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, <u>weinzier@uiuc.edu</u>. The *Illinois Fruit and Vegetable News* is available on the web at: <u>http://www.ipm.uiuc.edu/ifvn/index.html</u>. 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 Reports (from Elizabeth Wahle and Maurice Ogutu) Degree-Day Accumulations Notes from Chris Doll (phenology, apple and peach harvest, leaf analysis, state fair) Vegetable Production and Pest Management (corn earworm, corn leaf aphid, cucumber beetles) Fruit Production and Pest Management (preharvest intervals for apple and peach insecticides) University of Illinois Extension Specialists in Fruit & Vegetable Production & Pest Management

Crop Reports

In the south, corn earworm moths have arrived. Large numbers of moths (100-150 per night) were caught in traps starting the evening of July 7 near Collinsville. Corn earworm moths lay eggs singly, preferably on green silks, and larvae hatch in 2 to 4 days, depending on temperatures. They initially feed on silks as they move to the ear tip, and then they begin feeding on kernels. Without control, larvae will mature in a few weeks, then drop to the ground and pupate in the soil. First sprays should be applied no sooner than two days after the first silks emerge if pheromone traps are catching moths. Stop sprays when more than 90% of silks are brown. See the July 2 issue (no. 9) of this newsletter for more details on spray timing, etc.

Overall quality of the Illinois peach crop is high, and in terms of picking order, Redhaven harvest began around the holiday weekend within the region. The apple crop looks good for southern growers. Lodi came off trees around the fourth week of June in the northern portion of the region. Russetting has been reported on Goldens and Jonathans this season, and is quite possibly related to environmental conditions encountered during early season pesticide application as opposed to frost or near-frost conditions. Steven Hoying of Cornell University Cooperative Extension reported that this type of injury seems to occur when sprays are applied immediately after rain or frost. Practices that promote slow drying under high humidity favor russet formation. Methods that promote rapid drying tend to produce less russet. For example, low volume spray applications and daytime spraying both allow residues to dry quickly. Russet susceptibility does differ among cultivars. Goldens can show signs over the entire surface of the fruit, and Rome and Jonathans tend to develop russet only in the stem

cavity.

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

In northern Illinois, average day temperatures are in the upper 80s and night temperatures in the 60s and low 70s. During the last two weeks, soil moisture content is adequate to high. Most counties in the far north bordering Wisconsin received about 3 to 3½ inches of rainfall, while more than 6 inches of rainfall was recorded in Kankakee County in the last two weeks.

Cover sprays continue in apples, and codling moth counts increased last week in some orchards. Some growers started harvesting sweet corn last Thursday (July 10). Cabbage harvest is ongoing in the Kankakee area, and growers are dealing with cabbage looper control in later-planted fields. Bacterial leaf spot and cucumber beetles have been reported in some pumpkin fields.

The Rogers Park Farmers' Market located at Howard & Marshfield in Chicago, IL, is inviting fruit and vegetable growers to participate in their market held every Saturday. Growers interested in selling their produce through this market should contact Lynn Peemoeller at 773-508-5885 for more information.

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

Degree-Day Accumulations Since January 1, 2003

Data for the table below are taken from the Midwestern Climate Center web site (<u>http://mcc.sws.uiuc.edu/</u>). Degree days are calculated using a rectangular averaging method on a 50 degree Fahrenheit threshold, with the minimum temperature for calculations reset to 50 on days with highs above 50 and lows below 50.

Location	DD, Base 50 F, through July 7	DD, Base 50 F, through July 14	DD, Base 50 F, 40-yr average through July 14	DD, Base 50 F, projected through July 28
1. Carbondale	1857	2051	2146	2416
2. Belleville	2017	2215	2097	2663
3. Mt. Vernon	1686	1865	2025	2229
4. Springfield	1632	1797	1824	2153
5. Urbana	1605	1762	1681	2101
6. Peoria	1549	1712	1676	2062
7. Kankakee	1412	1565	1599	1898
8. Moline	1530	1692	1628	2035
9. St. Charles	1255	1399	1387	1701



Projections for degree day accumulations two weeks into the future are derived by adding historic averages for degree days for the next two weeks to the actual current total listed for each location.

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Notes from Chris Doll

Ripening fruits continue to be near the same harvest date as 2002. Red Haven peaches are being harvested from Belleville south, Lodi apples are about past, Pristine is being harvested here, and blackberries are coming in pretty strong. It is not as easy to determine the status of the insect and diseases to the calendar. Counts from codling moth and other insect traps have been very light, and if this is a true indication of low populations, all is at a bit of lull. We have just passed the traditional generation gap for codling moth and Oriental fruit moths, and maybe this is the reason.

The Pristine apple mentioned above is a good apple for the season. It is very smooth, clean and has enough firmness, crispness and flavor to satisfy customers. It appears that GingerGold and Gala will not be far behind in maturity. Arking from Arkansas is showing nice color and excellent size on Bud 9 stocks.

Peach customers have a definite preference for freestone fruit, and to date, they have not been very happy. Everything I have cut has been cling, and even Red Haven wants to be tight until its almost too late too pick. Sentry is rated semi-free by some catalogs, but it is only a tendency and not a fact in the Back 40.

Pest-wise, I have joined in the codling moth problem group, with more entries this year than the previous 37 put together. Mites have been stopped on both apple and peach trees, and now it is a battle against the Japanese beetles, which sometimes reminds one of an army that just keeps coming. They have found every Honeycrisp tree in the orchard. They also like the Saturn or donut peach as they ripen.

Rainfall has been spotty in the past three weeks, and drought stress will soon be evident if the heat continues. Calcium shortages in apple fruit is a common problem from drought, so maintaining calcium in the cover sprays is a good practice.

Mid July to mid-August is the suggested time for collecting leaves for analysis. This can be an important aid in developing and maintaining optimal nutritional conditions in the orchard or berry field. The process may or may not identify problems, but will show the amounts of nutrients present in the leaves or petioles and what the plant is getting from the soil. In recent years, the orchards that I have sampled have shown trends toward low potassium, boron, sulfur and zinc.

Primocane varieties of red raspberry are blooming profusely now and Autumn Britten and Caroline are showing ripe fruit as well. The 90-plus degree weather really takes a toll on the shelf life of these fruits. I once had a grower who really helped the heat problem by covering the field with shade cloth. Yields and quality were improved but the economics of installation were not very good.

The Illinois State Fair at Springfield is three weeks away. Will I have the privilege of judging more entries this year? The ribbons and trophies always look good in the sales room. By the way, a very attractive traveling trophy for the 2003 Illinois Hard Cider contest was presented to Lee Elliot, Apple Hill Orchard, at the recent ISHS Summer Orchard Day.

Chris Doll

Vegetable Production and Pest Management

Quick Notes on Vegetable Insects

Corn earworm: Elizabeth Wahle noted that moth counts were up at Collinsville; Ron Hines' report from far southern Illinois noted increases in Massac County as well (though counts were not in 100-150 per night range as they were near Collinsville). Check <u>issue 9</u> (July 2, 2003) for details on earworm control.

Corn leaf aphid: Although heavy rains in many areas should have helped to reduce corn leaf aphid infestations in many sweet corn fields, this is the time of year when numbers can increase quickly, especially in dry areas. This is a pest that migrates into Illinois each year on weather fronts, and female aphids give birth to live "baby" aphids. These young aphids (all female) reach adulthood in a few days and begin bearing young as well ... that's how populations increase so rapidly. Control corn leaf aphids on developing tassels in sweet corn to protect pollination. The threshold or decision rule is sometimes referred to as 50-50-50 ... treat if less than 50 percent of the field is pollinated and more than 50 percent of the plants are infested with more than 50 aphids per developing tassel.

Cucumber beetle control in blooming crops: Where control of spotted or striped cucumber beetles is necessary in fields that blooming and therefore attracting bees, the use of Sevin XLR Plus is less likely to cause severe bee kills than applications of most other effective insecticides or Sevin as wettable powder. The XLR formulation sticks to plants better and is not picked up carried back to the hive by foraging bees. If sprays are applied early in morning or late in the evening when bees are not foraging and the sprays dry before bees return to the field, the XLR formulation is not likely to cause significant bee kill. Slam, an insecticide that contains very low concentrations of carbaryl and a mixture of compounds that are attractants and feeding stimulants for cucumber beetles, is even safer. Do not apply Capture, Pounce, or rotenone to blooming crops during the day when bees are active.

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

Fruit Production and Pest Management

Preharvest intervals (the time period required between final application and harvest) for insecticides commonly used on apples and peaches:

Insecticide	Preharvest Interval (Days)		Insecticide	Preharvest Interval	
	Apples	Peaches		Apples	Peaches
Assail	7	not labeled	Intrepid	14	not labeled
Acramite	7	3	Kelthane	7-14	not labeled
Apollo	45	21	Lannate	14	4
Asana	21	14	oil	0	0
Avaunt	28	not labeled	Pounce	N.A.	14
Confirm	14	not labeled	Provado	7	not labeled
Danitol	14	not labeled	Pyramite	25	7
Dimethoate	28	not labeled	Savey	28	28
Diazinon	21	21	Sevin	3	3
Dipel	0	0	SpinTor	7	14
Esteem	45	14	Thiodan	21-30	21-30
Guthion	14-21	21	Vydate	14	not labeled
Imidan	7	14	Warrior	21	14

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

This issue's words of wisdom ...

- The Chief Executive of an HMO died and was very relieved that he got into heaven. Of course, he had to check out after 48 hours.
- There is no truth to the rumor that the Florida Orange Growers have offered O.J. Simpson \$3 million to change his name to Snapple.
- Diplomacy: the ability to tell a person to go to hell in such a way that they look forward to the trip.

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