



UNIVERSITY OF ILLINOIS EXTENSION

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

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a newsletter for commercial growers of fruit and vegetable crops

"We are what we repeatedly do. Excellence, then, is not an act, but a habit." Aristotle

Address any questions or comments regarding this newsletter to the individual authors listed after each article or to its editor, Rick Weinzierl, 217-244-2126, weinzierl@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.

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

Upcoming Programs

- **Mississippi Valley Peach Orchard Tour, May 22, 2008** ... at Rendleman Orchards, Route 127 Alto Pass IL. For more information contact Elizabeth Wahle at 618-692-9434 or wahle@uiuc.edu.
- **Illinois State Horticulture Society Summer Horticulture Day, June 12, 2008** ... at Tanner's Orchard, Route 40, Speer IL. For more information contact Elizabeth Wahle at 618-692-9434 or wahle@uiuc.edu.
- **NCR Organic and Sustainable Ag Video Series, 2008**. The University of Illinois is joining Purdue University, Michigan State University, and The Ohio State University to offer an interactive video conference series presented by researchers, organic farmers, and extension educators. The series is sponsored by Cooperative Extension Services at the four contributing universities and by funding from USDA's NCR Sustainable Agriculture Research and Education Program. The following link provides information about the 2008 program as well as information about the 2007 series: <http://tristateorganic.info>.

Regional Updates

At the Dixon Springs Ag Center in southern and Illinois, we have finished pruning blueberries, and they're now at pink bud stage. Crop potential remains very good for the 2008 season. In addition to making fungicide sprays as outlined in the *2008 Midwest Commercial Small Fruit and Grape Spray Guide*, growers should remain diligent about monitoring for voles and taking appropriate control measures when deemed necessary. It might be a good time to also apply pre-emergence herbicides for those growers that will be using them.

The 2008 strawberry crop also seems quite promising. Matted row strawberries are mostly in the tight bud stage with only a few varieties with open blooms. Plasticulture strawberries are blooming, and this year it seems they are a bit behind previous years' crops. Plasticulture strawberry growers should be making their weekly nitrogen and fungicide applications. It is important to remember that good gray mold control requires a good fungicide spray program during the petal fall period. Growers should also be scouting for eastern flower thrips on their strawberry blooms (for details see the [February 25, 2008, issue of this newsletter](#)).

Apples are mostly at pink and peaches are mostly at petal fall. We will begin strep sprays for fireblight in apples this week. The new peach trees established at DSAC in March are beginning to leaf out.



Images from Dixon Springs: (clockwise from upper left) pruning blueberries; a new peach tree beginning to leaf out; plasticulture garlic; and plasticulture strawberries.

On the vegetable side of things, growers have planted their tomatoes in high tunnels while tomato transplants for field production continue to grow in greenhouses. It appears that growers may be late in getting necessary field work completed, so they may wish to try to slow the growth of their transplants in the greenhouse. A few growers have sweet corn beginning to emerge in their plantings made on black plastic. Potatoes and onions planted in black plastic are also beginning to grow. At DSAC, we have garlic on black plastic that has made it through the winter in good shape and is growing vigorously.

Jeff Kindhart (618-695-2444; kindhar@uiuc.edu)

In northern Illinois, day temperatures have ranged from the low 40s to mid 60s, with night-time lows in the upper 20s to low 40s for the first two weeks of April. With 2-3 inches of rain this month, the ground is wet, and very little spring tillage has been accomplished so far. Pruning of small fruits and tree fruits is ongoing, and these crops are still in dormancy. Potato planting is underway in the Kankakee area, but planting of other cool season vegetables such as peas, cabbage, broccoli, and onions remains delayed by wet soils in most of the region. Greenhouse production of vegetable transplants is underway.

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

Notes from Chris Doll

Although spring is three weeks old, it seemed for a while that tree fruits and small fruits would never bloom. After a couple of wet and cold weeks, peaches are almost in full bloom and apples will be showing pink in a couple of days. Open flowers of peaches and Japanese plums survived two nights of frost and freezing temperatures (low of 29.3 degrees) on the 14th and 15th. My 37-year record of fruit phenology shows lots of variations in full bloom dates on both apples and peaches and also lots of variation in the number of days required to move from half-inch green through pink and into full bloom. In 1971 that sequence took 7 days. In 2007

it took 12 days. The longest time was in 1974, when green tip was early and it took 38 days before full bloom showed on April 23. Full bloom of peach this year is the latest since 2001, and it is anticipated that apple bloom will be comparatively late too.

April showers have been plentiful this year. From the first through the 10th, there was rainfall on 8 days that kept the data logger wet for over 72 hours. Continuous wetting in excess of 13 hours happened three times. It appears that ample wetting was available for apple scab spore release. Coupled with the potential problem of apple scab is collar rot on wet soil sites. Ridomil or copper sprays in susceptible blocks could be in order this year. Applying sprays has been difficult because of wet soils and windy conditions.

The DD-50 for this site is now (April 15) at 94, which means that Oriental Fruit Moths are expected to find the traps in a few days. Then it won't be long for the codling moth and San Jose scale traps to be working.

I see and hear of some variations in peach bud survival this year, but there should be enough for a crop if the freezes stay up north. I have also heard of some light blooming in apple trees in southern Illinois, and this is most likely due to stress from the heat and drought of 2007. If favorable weather prevails in the next two weeks, there will be plenty of fruits needing removal. Blossom thinning of peach may not be so much of a gamble this later blooming season. Chemical thinning of apples may best be started with some petal fall sprays.

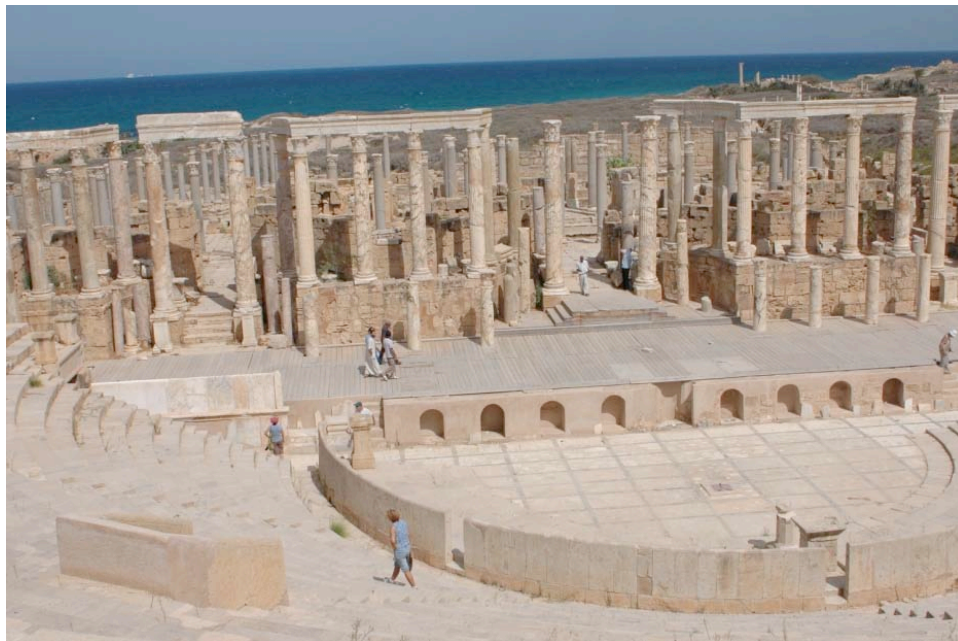
Apogee applied at petal fall or just as shoot growth is beginning for growth control and fireblight suppression has been successful for some growers in this area when the first application is made before shoot growth is 1-1.5 inches long (early petal fall). The label rate is 3-12 ounces per 100 gallons of dilute spray, and multiple sprays are needed. Lower rates of 3-6 ounces applied at 2-week intervals for 3-4 sprays have been effective and economical. Details are in the [Spray Guide](#).

Chris Doll

Fruit Production and Pest Management

Note from a Desert Nomad (Mosbah Kushad)

During the last two weeks I have been traveling through North Africa, primarily in my country of birth, Libya, visiting with fruit and vegetable farmers and extension specialists. Libya is the third largest country in Africa (nearly 1.1 million square miles) and has the longest shore-line, stretching nearly 1,100 miles on the Mediterranean Sea. The country is mostly desert (about 92 to 95%), with no flowing rivers and an average rainfall of 8 to 12 inches per year. Rainfall is limited to a narrow area (about 30 miles) along the coastline on the eastern and western end of the country, but very scarce (less than 2 inches) in the rest. The country is also very hot during the summer, with average daily temperature in the southern part exceeding 105 degrees F. The hottest temperature (136.2 F) ever recorded on earth was on September 13, 1922 in a town called El-Azizia, south of the capitol Tripoli by about 30 miles.



Leptis Magna, Libya

There are five Roman and Phoenician cities in Libya, including Leptis Magna (Roman) and Syrene (Greek) as well as ancient paintings in a mountainous area called Akakos.

About a week ago I visited several oases deep into the desert close to the third largest city in Libya, Sabha. The average population of these oases often does not exceed one hundred, mostly working for the government. A few are farmers growing grains, date palms, lemons, and onions; they also raise camels, and the young work as guides to the very few European tourists. One of the most serious issues facing many of these oases is lack of water management/conservation. A local farmer complained that the water table has dropped nearly a hundred feet in the last few years and that the water is becoming too salty to drink. The main reason for this is that the limited amount of underground water is being heavily used (abused) to irrigate a huge number of government and private grain farms. I visited several of these farms where center pivot irrigation lines ran nearly non-stop. Local officials either don't care or they lack the knowledge to deal with the problem. One of the most beautiful sites deep in the desert is a series of four small, very salty lakes, each surrounded with sand dunes and palm trees. The biggest is called Lake Gabr-Own (Dawada Lake), which is surrounded by one of the largest sand dunes in Africa (see photo).



Lake Gabr-Own, Libya

No one knows how deep these lakes are or the impact of agricultural irrigation on the water level. One of these lakes (Lake Mandara) has dried in recent years, probably due to seepage of its water into the underground aquifer. Dwindling water resources are likely to result in migration of many of the desert inhabitants into the cities in the north where there is some rainfall.

There are very few full-time farmers in Libya. Most work for the government but rely on unskilled labor from other countries in Africa to run the farm. White grains, dates, potato, onions, garlic, oranges, olives, grapes, and peaches are the major horticultural crops grown in western Libya. Apples are grown in the eastern part of the country in an area called Al-Jabal Al-Akhdar, a mountainous region with an average rainfall of about 12 inches a year. 'Red delicious' and 'Golden Delicious' are the two most popular cultivars, however no one knows the rootstocks they are grafted on. They also don't believe in fruit thinning and they apply very few pesticides.

Despite the lack of water, the vast desert of Libya remains one of the most unspoiled wildernesses in the world. The tourists that I talked to were very fascinated with the desert night skies and the beautiful sand dunes. Libya is one of the cheapest countries to visit if you can get a visa. It is also a very safe place to travel. Most tourists enter the country in groups organized by tourist offices in Italy and the Czech Republic. Unfortunately, it is very difficult for US citizens to enter the country at this time.

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

Fruit Insect Management Considerations

Eastern flower thrips: Jeff Kindhart mentioned strawberry bloom and eastern flower thrips ... this week's strong southerly winds may transported this insect to us from the south, so be sure to scout. Scouting methods and insecticide recommendations are summarized briefly in the [February 25, 2008, issue of this newsletter](#).

Bloom and Petal-fall insect control in apples and peaches: As apples and peaches in the south progress through bloom and petal fall, it's a good time to remember what insect management practices are needed at this time. The key thing to do during bloom in apples is to hang pheromone traps for codling moth by early bloom and begin checking them two to three times per week to learn when flight begins. The first significant and sustained captures in traps provide the biofix date for degree-day models. Similarly, traps for oriental fruit moth should be in place by pink to first bloom of peaches ... earlier this week traps in southern IL had not yet captured any oriental fruit moths, but flight is expected to begin soon. Where mating disruption is to be used for control of codling moth or oriental fruit moth, dispensers should be applied during apple bloom for codling moth and peach pink for OFM (although waiting and beginning mating disruption at the time second generation oriental fruit flight begins is another approach that can work effectively in peaches where first generation control in shoots can be achieved by sprays needed for control of other insects, particularly plant bugs, stink bugs, and plum curculio). At petal fall in these crops, the insects of greatest concern are usually plum curculio and plant bugs in both crops, leafrollers, leafminers, and white apple leafhoppers in apples, and stink bugs in peaches. Pages 6-7 and page 26 of the [2008 Midwest Tree Fruit Spray Guide](#) list the insecticides labeled for use at petal fall against these insects in apples and peaches, respectively. Page 12 presents a summary of effectiveness of insecticides against specific pests of apples. An obvious reminder ... don't spray for pests that have not been problems in the past and that are not observed at damaging levels in scouting efforts. Check the [Midwest Tree Fruit Pest Management Handbook](#) for scouting guidelines.

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Vegetable Production and Pest Management

Presidio, Another New Fungicide for Vegetable Crops and Grapes

Presidio 4.0 SC is another new fungicide that was recently registered for use on vegetables and grapes. Presidio contains 39.5% fluopicolide (4.0 pounds a.i. per gallon) and is a fungicide in group 43 (FRAC code 43). It is manufactured by Valent and can be used to control downy mildew and Phytophthora diseases of cucurbits; late blight and other Phytophthora diseases of fruiting vegetables (peppers, eggplant, tomatillo, tomato, and others); downy mildew and white rust of leafy vegetables (amaranth, celery, endive, lettuce, parsley, spinach, Swiss Chard, and other leafy vegetables except Brassica vegetables); late blight and pink rot of sweet potato; and downy mildew of grape. Presidio exhibits protective, curative, eradicated and antispore activity. It is locally systemic and translaminar and also moves systemically via xylem tissue. Optimum disease control is achieved when Presidio is applied in a regularly scheduled spray program used in combination and/or rotation with other effective fungicides that have different modes of action (i.e., non Group 43 fungicides). Tank mixing of Presidio with a fungicide from a different FRAC category and labeled against the same pathogens is recommended for resistance management. The maximum Presidio application rate is 4 fl oz per acre per application and 12 fl oz per acre per season. No more than 2 sequential applications of Presidio should be made before alternating with an effective fungicide from a different FRAC group. No more than 4 applications of Presidio per season should be made. Minimum time from last application to harvest (PHI) is 7 days for sweet potato, 2 days for all other vegetables, and 21 days for grape. More information on Presidio is available at <http://www.cdms.net/LDat/ld8J5001.pdf>.

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

New Supplemental Label for Reflex Preemergence on Dry Beans and Snap Beans

Reflex (fomesafen), manufactured by Syngenta Crop Protection, has received a supplemental label allowing preemergent (PRE) applications to dry and snap beans. Reflex currently has a label for postemergent (POST) applications to dry and snap beans. POST applications of Reflex have been important for the control of puncturevine and eastern black nightshade in snap beans. Reflex has also been important for managing ALS-resistant pigweed, common lambsquarter, and eastern black nightshade.

The new supplemental label allows Reflex to be applied to the soil surface prior to planting or after planting but before emergence of dry and snap beans. Reflex can be used with PRE herbicides such as Command, Dual Magnum, pendimethalin products such as Prowl H₂O, trifluralin products, Eptam, and Pursuit to broaden the weed control spectrum. Since trifluralin products and Eptam must be incorporated, make sequential applications with Reflex. PRE applications of Reflex will control galinsoga, common lambsquarters, eastern black nightshade, redroot and smooth pigweed, and common purslane. Reflex can be PRE applied at 1 to 1.5 pints/A to dry and snap beans. Do not apply Reflex more than once every two years to any field.

What are the advantages of PRE applications over POST applications of Reflex? PRE applications of Reflex provide residual weed control from crop emergence and do not require a delay until beans have developed trifoliate leaves. PRE applications are not as dependent on weed size or environment. Also PRE applications of Reflex provide better control of common lambsquarter and pigweed than Reflex POST. PRE applications of Reflex control galinsoga, common ragweed, and ALS-resistant weeds better than Pursuit PRE.

John Masiunas (217-244-4469; masiunas@uiuc.edu).

Less seriously ...

More truisms:

- Birds of a feather flock together ... and crap on your car.
- When I'm feeling down, I like to whistle. It makes the neighbor's dog run to the end of his chain and gag himself.
- A penny saved is a government oversight.
- The real art of conversation is not only to say the right thing at the right time, but also to leave unsaid the wrong thing at the tempting moment (obviously a lesson that the editor of this newsletter has not learned well).

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