

College of Agricultural, Consumer, and Environmental Sciences

Illinois Fruit and Vegetable News

Vol. 17, No. 9, July 21, 2011

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://www.ipm.illinois.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 Staff in Fruit & Vegetable Production & Pest Management

Upcoming Programs

- University of Illinois Dixon Springs Agricultural Center Field Day, August 4, 2011, at the Dixon Springs Ag Center near Simpson, IL. Tours begin at 9:00 a.m. Speakers will discuss a variety of topics, including high tunnels for tomato and small production in southern Illinois. There is no cost to attend this event, and a free meal will be provided. The Dixon Springs Agricultural Center is located on Illinois Route 145 near Glendale. It is 25 miles south of Harrisburg and 25 miles north of Paducah, Ky. More to follow in the July 18 issue of this newsletter. Certified Crop Advisor credits will be provided. For more information, call the Dixon Springs Agricultural Center at 618-695-2441.
- Good, Bad and Ugly of Soils and Crops: A Walk and Talk Tour, July 30, 2011, at Spence Farm, 2959 N 2100 E, Fairbury, Illinois (Livingston County). Bob Boehle (Boehle Consulting, Bloomington, IL) will conduct a walk and talk through the production areas at Spence Farm and address signs of fertility deficiency, crop stress and what might be limiting factors growing nutrient-rich produce. 9:00-11:30 am (registration starting at 8:30 am). For more information and to register check http://www.cisfn.org or contact Deborah Cavanaugh-Grant at cvnghgrn@illinois.edu, 217-782-4617.
- Annual Allison Farm Field Day, August 3, 2011, at the WIU/Allison Organic Research and Demonstration Farm. Topics will include carbon sequestration, nutrient management, cover crops, and other strategies for building and maintaining good soil; enjoy a free lunch featuring local farm products. The keynote lunch speaker will be Steve Groff of Cover Crop Solutions. All activities are free and open to the public, but advance registration is required for the morning session and free lunch. Please register by Monday, August 1. Online registration is at http://illinoisorganicgrowers.org/category/community/events. To register by phone, call Carol Elder at 217-454-1204. The WIU/Allison Organic Research and Demonstration Farm is located at 130 20th Street, Roseville, IL.
- Evaluating Soil Quality, Saturday, August 6, 2011, at Cow Creek Farm, 2112 East 100N, Paxton IL (Ford County). Jeff Glazik and Roger Windhorn of USDA Natural Resources Conservation Service will demonstrate how to collect soil samples for soil testing, and how to measure simple soil quality indicators such

as soil structure, water infiltration, and soil penetration resistance. Participants will also have an opportunity to review soil test results, learn how to interpret findings, and discuss how to use county soils maps developed by the Natural Resources Conservation Service (NRCS), particularly when considering land for purchase or lease. 1:30pm-4:00pm (registration starting at 1:00 pm). For more information and to register, check http://www.cisfn.org or contact Deborah Cavanaugh-Grant at cvnghgrn@illinois.edu, 217-782-4617.

Regional Updates

In northern Illinois, as elsewhere, sunny, hot days and warm nights have been the rule during the last 2 weeks, and more of the same is to come. Soil moisture is low, as less than 1 inch of rainfall was recorded in the region during the last two weeks, and irrigation equipment is running on many farms.

Orchardists are continuing with summer spray programs, and it is time to include calcium sprays. Sour cherry harvesting is going on in some orchards, and they need to be protected from cherry leaf spot and brown rot disease. Japanese beetles are numerous and require control in several crops. Summer raspberry and blueberry harvesting is also going on in some farms, but June-bearing strawberry harvest is done in the region.

Harvesting of cucumbers, green beans, and summer squash is underway, and harvest of cabbage, collards, and mustard greens continues as well. There are reports of late blight on tomatoes in some northern counties. Tomato diseases such as early blight, and septoria leaf spot were observed in some fields. Squash vine borer is present in some cucurbit fields in the region, and also cucumber beetles, and aphids. (See the <u>June 30 issue of this newsletter</u> for notes on squash bug and squash vine borer life cycles and management.)

Maurice Ogutu (815-235-4125; ogutu@illinois.edu)

Notes from Chris Doll

Summer is definitely here and I feel for the peach pickers especially, but for all that are doing physical work in the high temperatures. It won't take long for the later maturity season to catch up to previous years' harvest dates. Peaches are coming in fast with good soil moisture and the higher temps. Early apples are also moving fast and improving in size. Pristine are past and Early Gold will be picked here this week. My degree days since a May1 biofix of codling moth approximates 1875 DD which puts us well into the second generation, but reports of low pressure and infestation in local orchards is good news. Some red mites have required chemical control recently. Diseases remain fairly quiescent. Moderate apple scab was seen in one orchard that suffered from the 'turn-row malady' of insufficient application to the last or first trees in the row. Fire blight infections were generally light, but I did see some late infection that apparently got in via 13-year cicada egg laying punctures, and one of them was in the Back 40. The total of 282 wet hours is more than enough to allow sooty blotch and flyspeck to get started on un-protected fruits, but none has yet been seen.

The wet spring locally has provided ample moisture for most bramble plantings up to this time. However, their water requirement is fairly high, and plants and harvest yields will decline rapidly in volume and quality without irrigation in this current heat and drought spell. The white drupelet or drupelets syndrome time is upon us, and watering will help a lot. The heat is quite a detriment to growing primocane berries in this area. Autumn Britten is ripe now, and Heritage is only 10 days away, and both are exposed to 90-degree temps. They can be moneymakers but usually not with the 90+ temps. The primocane blackberries that Dr. John Clark developed in Arkansas sometimes grow better in other zones. The great potential for this strain seems to be limited by the fact that the pollen is sensitive to heat, and poor pollination may be a result in current conditions. Back to apples, the heat and dry conditions are also conducive to calcium uptake by the trees which makes the addition of calcium to the summer sprays more important.

The season for applying Retain for delaying fruit maturity is here or maybe past for some Gala growers. 30 days prematurity is the usual guideline. The last "Alert" from Michigan indicated that peak harvest dates for most varieties are behind last year, but again current conditions might change that situation. As for Retain applications, it is written up in the Midwest Spray Guide, but Win Cowgill of Rutgers had an excellent write up on its use in the <u>Rutgers Fruit Plant</u> and <u>Pest Advisory</u> on July 5. (Volume 16, Number 14). Critical at this time is that half rates of Retain on Gala are usually enough to get full benefit from Retain.

I missed writing in the last issue of this letter, which was the time for cautioning abandonment or extreme caution of the use of glyphosate(Roundup) in tree fruit. In addition to the problem of bark injury that was publicized last winter, the absorption and uptake of the chemical by leaves on basal sprouts and low hanging leaves can be translocated into the trunk and roots for destruction of cellular tissue which will show up in the next growing season.

A couple of years ago, I listened to a presentation by researchers from Arkansas on their research on mulching in an organic apple orchard as it affected vole populations and their injury to the trees. The treatments were green compost, wood chips. shredded white paper, and a mow and blow cover crop into the tree row. The study was designed for weed control and tree benefit differences, but turned into a paper about voles when approximately 35% of the trees were damaged in the mow and blow plots. The wood chips had the least tree injury and the other two treatments had 5% injury. (ASHS Hort. Abstracts, 2008)

The 2011 crop variations have not been limited to SW Illinois. I have mentioned earlier about a later season, variable apple bloom and set, some overthinning of apples, small or buttoned peaches, poorly pollinated cherries, both sweet and sour, and also plums, and variability in harvest dates to name a few. Those of us that read reports from other state can see similar comments from states such as Michigan, Indiana and New Jersey. It gives all of us something to think and ponder about.

Chris Doll

Local Foods Issues

Using the Web to Promote Your Business

Advertising is a necessity for business owners who want to promote their products. Yet advertising can be a costly venture – especially for the small producer. A professionally designed website may fall well outside the budget. Luckily there are several avenues available to farmers who want to promote their business without the expense of paid advertising.

MarketMaker is a great way for farmers to get their business information into the hands of potential customers. A business profile may contain a list of products for sale, their attributes, methods of sale, photos of products and/or farm, hours of operation, and much more. There is no cost associated with creating a profile or for using the site to find a business. It is a practical way of connecting producers with markets. MarketMaker contains over 500,000 businesses, making it one of the most extensive collections of searchable food-related data in the country. MarketMaker registration is available at: www.marketmaker.uiuc.edu/.

Thanks to the creation of social media, there are also other opportunities for producers to engage customers and promote their business for little to no cost. Free tools such as Facebook and Twitter can provide business exposure to millions of people. In addition, many businesses now have fan pages that are more appealing than a basic website. Facebook gives businesses the opportunity to interact with customers and communicate with others in the industry. Learn more about Facebook Fan Pages at: www.facebook.com/help/?page=904

Twitter is a quick, 140 characters or less, way for producers to connect immediately about a topic. If you have email, you can go to www.twitter.com and sign up for a Twitter account in less than five minutes. Farmers are rarely near a computer during the day, but most carry cell phones. Twitter allows the user to tweet from a phone in the form of a text or through an app. Tweets can keep the public up-to-date on everything from crop availability to daily life on the farm.

It's easy to take advantage of these promotional opportunities and begin using these free marketing tools. Become a fan of MarketMaker at: www.facebook.com/FoodMarketMaker and follow MarketMaker on Twitter at: http://twitter.com/#!/FoodMarketMaker.

Lori Dalfonso (309-792-2500; dalfonso@illinois.edu)

Fruit Production and Pest Management

Woolly Apple Aphid

Art Agnello included the following note on woolly apple aphids in the most recent issue of New York's Scaffolds newsletter ...

"If you failed to prevent their migration from the lower trunk areas in June, there could be aerial colonies evident in canopies now. This is a difficult pest to control completely, but now will be better than later in the month. The best material we have available (still) is Diazinon; Movento and Thionex are other, possibly less effective, options. Assail and Beleaf are also labeled for this pest, but we have no efficacy data on these particular products. Alternatively, if you're not on a Captan program, a summer horticultural mineral oil application, using as much water as you can manage, has been shown to be effective.

For more information on this insect, see the February 7, 2011 issue of the *Illinois Fruit and Vegetable News*.

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

European Red Mite

As Chris Doll noted above, there have been a few reports of European red mite infestations in apples in Illinois, and Rick Foster noted outbreaks in some Indiana orchards a few weeks ago. Current weather conditions definitely favor rapid increases of any existing infestations. Growers are advised to scout for red mites and use a hand lens to count the number of mites on leaves. Thresholds for control vary as the season progresses; the mid-season threshold is 5 mites per leaf, and by late July and early August, the threshold increases to 7.5 mites per leaf. By mid to late August, European red mites begin to lay overwintering eggs that will not hatch until next year, and densities of nymphs and adults subside. The <u>Midwest Tree Fruit Pest Management Handbook</u> includes guidelines for a more efficient approach to sampling that involves categorizing leaves as infested versus uninfested instead of counting all the mites on each leaf. For those who are scouting lots of blocks or orchards, using this approach is definitely worthwhile.

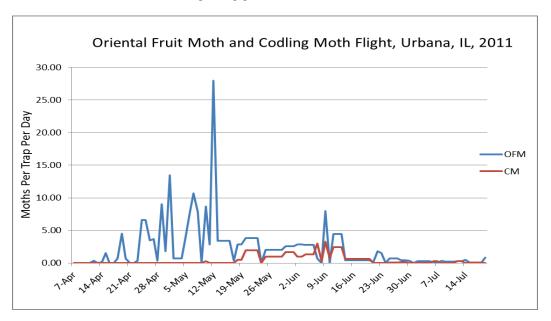
There are lots of good summer miticides for European red mite control in apples, including Acramite, Envidor, Fujimite/Portal, Kanemite, Nexter, Onager, and Zeal. See the listing on page 22 of the 2011 *Midwest Tree Fruit Spray Guide* for details.



Adult European red mite, stippling of foliage, and severe bronzing of foliage. (Purdue University)

Update on Oriental Fruit Moth and Codling Moth Flights

The graph below tracks counts of oriental fruit moth and codling moth in traps at the University of Illinois orchard at Urbana ... note that the scale indicates moths per trap per DAY.



For oriental fruit moth, since biofix on April 16, degree-day accumulations (base 45 F) through July 20 totaled 2213, so we should be nearing peak third generation flight. These data are from our unmanaged block of apples, and OFM flight has not built at all in this block. We have, however, started capturing more OFM adults in our nearby peach block.

Since a May 19 biofix for codling moth, degree-day accumulations (base 50F) are now at 1514. That suggests we should be about 75 percent of the way through second generation flight, but midsummer moth counts have been very low ... for reasons we cannot explain.

As noted in the previous issue of this newsletter, several insecticides are effective at preventing oriental fruit moth and codling moth entry into peaches and apples; see the 2011 Midwest Tree Fruit Spray Guide for a listing.

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

Less seriously ...

A minister dies and is waiting in line at the Pearly Gates. Ahead of him is a guy who's dressed in sunglasses, a loud shirt, leather jacket, and jeans. Saint Peter addresses this guy, "Who are you, so that I may know whether or not to admit you to the Kingdom of Heaven?" The guy replies, "I'm Joe Cohen, taxi driver, of Noo Yawk City." St. Peter consults his list. He smiles and says to the taxi driver, "Take this silken robe and golden staff and enter the Kingdom of Heaven." The taxi driver goes into Heaven with his robe and staff, and it's the minister's turn. He stands erect and booms out, "I am Joseph Snow, pastor of Calvary for the last forty-three years." St Peter consults his list. He says to the minister, "Take this cotton robe and wooden staff and enter the Kingdom of Heaven." "Just a minute," says the minister. "That man was a taxi driver, and he gets a silken robe and golden staff. How can this be?" "Up here, we work by results," says Saint Peter. "While you preached, people slept; while he drove, people prayed.

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