

# Ohio Fruit ICM News

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## Calendar - Newly added in ***Bold***

June 21, 2006, Twilight Fruit Tree Field Meeting, 6:30 p.m.~9:00 p.m. Heartland Orchard, 13029 Laurel Hill Road, Thornville, Ohio. Featured fruits of the evening will be apples, peaches, pears, and grapes. Speakers for the evening include: Dr. Celeste Welty, OSU Entomology, Dr. Diane Miller, OSU Horticulture, Mark Schmittgen, Grower. For more information contact Howard Siegrist, OSU Extension-Licking County, Phone: (740)670-5315

June 21-22, OVPGA Tour. For more information contact Tom Sachs at 614-246-8290 or email at [tsachs@ofbf.org](mailto:tsachs@ofbf.org)

June 28, OFGS Summer Tour at White House Fruit Farm in Canfield, Ohio. For more information on the tour, contact Tom Sachs or Kathy Lutz at (614) 246-8292 or via email at [klutz@ofbf.org](mailto:klutz@ofbf.org).

**July 17, Twilight Tour at Lynd Fruit Farm.** 7PM 9303 Morse Road Pataskala, OH Andy Lynd, Vice President of DAMA will be our host and moderator. Come out and see/hear about the Lynd operation from apples to daylilies to pumpkins to the corn maze. Sponsored by the Direct Agricultural Marketing Association and OSU Extension-Licking County. For more information contact Howard Siegrist at 740.670-5315.

**July 18, Field Crops Day**, Custar. The program will run from 6-9 PM and talks will include: “Preserving Glyphosate Utility in a Continuous Roundup Ready World,” Mark Loux, weed scientist/specialist with OARDC and OSU Extension, “Crop Disease Concerns and Management,” Anne Dorrance, OARDC and OSU Extension plant pathologist, “Insect Issues Impacting Producers,” Ron Hammond, OARDC entomologist, “Water Management,” Norm Fausey, soil scientist with the U.S. Department of Agriculture’s Agricultural Research Service (USDA-ARS) and an adjunct professor in Ohio State’s Department of Food, Agricultural, and Biological Engineering. Contact Matt Davis at (419) 257-2060 or [davis.1095@osu.edu](mailto:davis.1095@osu.edu) for more information.

Aug. 1 UK Horticultural Research Farm Twilight Tour, Horticultural Research Farm, Lexington, KY. Contact John Strang 859-257-5685; e-mail: [jstrang@uky.edu](mailto:jstrang@uky.edu)

August 22-23, North American Strawberry Growers Association Summer Tour, Portland Maine. For more information, <http://www.nasga.org/>

Aug. 30-Sept.1 North American Fruit, Explorers (NAFEX) and SFF Annual Meeting, Holiday Inn North, Lexington, KY. Contact John Strang 859-257-5685; e-mail: [jstrang@uky.edu](mailto:jstrang@uky.edu)

September 19-21, Farm Science Review, Molly Caren Agricultural Center, London. <http://fsr.osu.edu/>

September 21, Grape and Pawpaw Field Day KSU Research Farm, Mills Lane, Frankfort, KY. For more information contact Kirk Pomper at 502-597-5942

December 5-7, Great Lakes Fruit, Vegetable and Farm Market EXPO. DeVos Place, Grand Rapids, Mich., [www.glexpo.com](http://www.glexpo.com).

January 7-9, 2007, Wisconsin Fresh Fruit and Vegetable Conference, Olympia Resort and Conference Center, Oconomowoc, [www.wisconsinfreshproduce.org](http://www.wisconsinfreshproduce.org)

Jan. 8-9, 2007, Kentucky Fruit and Vegetable Conference and Trade Show, Holiday Inn North, Lexington, KY. Contact John Strang 859-257-5685; e-mail [jstrang@uky.edu](mailto:jstrang@uky.edu)

February 9-12, 2007, North American Strawberry Growers Association Strawberry Symposium. Ventura, California. For more information, <http://www.nasga.org/>

## **Comments from the Editor**

One more day until the official start of summer, but we have still been dry. The afternoon showers this week should help. The first of the local blueberries and black raspberries are ripe. Day-neutral strawberries will be ripe in a few days.

**Leaf Yellowing in Honeycrisp** - (source: FFF06-05, Hirst)

Since the early days of Honeycrisp, growers of this variety have been concerned about a leaf disorder that shows up about the middle of the growing season. Typically, leaves become thick and leathery, and turn lighter green, yellow, or even brown later in the season. These symptoms were similar to damage caused by potato leafhoppers, but research by Jim Schupp and others in New York showed that trees protected from leafhoppers still exhibited the disorder. The leaf yellowing symptoms typically show up about the time that shoots stop growing and are more severe on trees with a light crop. As leaves produce carbohydrates from photosynthesis, these carbohydrates need to be transported to other parts of the tree where they are needed, such as developing fruit and roots. Dr. Lailiang Cheng and his coworkers at Cornell University found that Honeycrisp has trouble transporting carbohydrates out of leaves, and therefore they accumulate. The leaf responds by reducing the amount of chlorophyll in the leaves, leading to yellow leaves. The best remedy is to leave a moderate crop load on the tree to reduce the yellowing, but thinning must be done early to avoid biennial bearing.

### **Skin Cancer** - (source: FFF06-05, Hirst with info from the American Cancer Society)

With many of us working outside in the sun, we need to stay alert to spot the signs of skin cancer. Skin cancer is the most common form of cancer, accounting for almost half of all cancers. More than 1 million cases of non-melanoma skin cancer are found in this country each year. The American Cancer Society estimates that more than 62,000 new melanomas will be diagnosed in the United States during 2006. Melanoma is a cancer that begins in the melanocytes the cells that produce the skin coloring or pigment known as melanin. If melanomas are detected early, the 5-year survival rate is 98%, but if left undetected and only found later, the survival rate drops to 16%. In 2006, about 11,000 people in the US will die from skin cancer (7,910 from melanoma and 2,800 from other skin cancers).

The risk factors include:

- Unprotected and/or excessive exposure to ultraviolet (UV) radiation
- Fair complexion
- Occupational exposures to coal tar, pitch, creosote, arsenic compounds, or radium
- Family history
- Multiple or atypical moles
- Severe sunburns as a child

The signs and symptoms of skin cancer include:

- Any change on the skin, especially in the size or color of a mole or other darkly pigmented growth or spot, or a new growth
- Scaliness, oozing, bleeding, or change in the appearance of a bump or nodule
- The spread of pigmentation beyond its border such as dark coloring that spreads past the edge of a mole or mark
- A change in sensation, itchiness, tenderness, or pain

The best ways to lower the risk of skin cancer is to practice sun safety:

- Avoid the sun between 10 a.m. and 4 p.m. (ok, maybe this is not practical for those working outdoors, but read on)
- Seek shade: Look for shade, especially in the middle of the day when the sun's rays are strongest. Practice the shadow rule and teach it to children. If your shadow is shorter than you, the sun's rays are at their strongest.
- Slip on a shirt: Cover up with protective clothing to guard as much skin as possible when you are out in the sun. Choose comfortable clothes made of tightly woven fabrics that you cannot see through when held up to a light.
- Slop on sunscreen: Use sunscreen with a sun protection factor (SPF) of 15 or higher. Apply a generous amount (about a palm full) and reapply after swimming, toweling dry, or perspiring. Use sunscreen even on hazy or overcast days.
- Slap on a hat: Cover your head with a wide-brimmed hat, shading your face, ears, and neck. If you choose a baseball cap, remember to protect your ears and neck with sunscreen.
- Wear sunglasses with 99% to 100% UV absorption to provide optimal protection for the eyes and the surrounding skin.
- Follow these practices to protect your skin even on cloudy or overcast days. UV rays travel through clouds.

In farming, it may be impossible to avoid exposure to the sun. However some of the steps listed above can be followed to reduce the harmful effects of the sun. And if you do spot something suspicious on your skin, get it checked out by a medical professional immediately.

**Take Advantage of Food Safety Initiative by September 30** by John Wargowsky - Executive Director, Mid American Ag and Hort Services

The Ohio and Indiana Specialty Crop Food Safety Initiative helps commercial fruit and vegetable producers to improve the marketability and safety of the food they grow and sell by a) increasing the adoption of Good Agricultural Practices and b) achieving better third party food safety audit scores. This Initiative will continue to offer free services and materials through September 30, 2006. At that time, the Initiative will be suspended with the possibility of being reactivated if funding is found in the future.

Mid American Ag and Hort Services and the Center for Innovative Food Technology manage the Initiative in partnership with the United States Department of Agriculture Risk Management Agency. Growers may continue to take advantage of free food safety presentations, on-farm consultations (walk throughs, food safety plan development, mock audits) and good agricultural practices materials (posters, guides, self-assessments, brochures, guides, videos) through September 30.

Contact Mid American Ag and Hort Services at 614-246-8286, [maahs@ofbf.org](mailto:maahs@ofbf.org) or visit [www.midamservices.org](http://www.midamservices.org) and click on "Projects" for more information.

## **Passing a Third Party Food Safety Audit** by Shari L. Plimpton, Ph.D., Food Safety Educator - Ohio and Indiana Specialty Crop Food Safety Initiative

Passing a third party food safety audit can be simplified to one basic concept: develop a food safety program and demonstrate that you are implementing that program. Remember as you approach a food safety audit that the ultimate goal is to demonstrate your emphasis on growing food safely and willingness to learn new methods for improving the safety of your operation. It's easy to get caught up in trying to understand what the auditor is looking for and achieving a passing score, while losing sight of the real goal for these audits. If you keep your eye on the food safety ball, you will achieve your goal of passing.

Food Safety Programs have been developed to include all of the possible tools that growers could use to assure the safety of their produce. When a grower who is new to GAPs is confronted with all of these tools it is easy to see why they might throw their hands up and declare that what they are being asked to do is impossible. Common sense plays a large role in determining what elements of a food safety program apply in your situation.

Take advantage of the free consulting services we offer through the Ohio and Indiana Specialty Crop Food Safety Initiative (Initiative). Also, working with your third party auditing company, to understand their perspective and expectations prior to the audit will only make things go more smoothly. This is your food safety program, so think it through and focus on those parts that apply to your operation.

Fortunately, not all of the possible documentation is necessary in order to demonstrate that you are following Good Agricultural Practices, Good Handling Practices and Good Manufacturing Practices. For this reason I have compiled a list of issues/documentation that would be considered necessary (although not a guarantee) to passing a third party audit.

**Food Safety Program** – Any grower who has participated in the GAPs consults with our program has received support in developing a Food Safety Program. These programs are complete and exhaustive; however, they are not meant to imply that all of the documentation available in the program must be filled out to comply.

**Water Quality** – Have documentation available demonstrating the potability of your water. If you're using wells then have annual tests available for review that demonstrate Fecal Coliform and E. coli levels. Reservoirs/ponds/rivers should be tested quarterly.

Water used for washing purposes should be treated to assure sanitation of the surface of the produce. Methods differ based on the type of produce and handling methods.

Maintain a log for testing the treated water for sanitizer levels at least at the beginning of the day, in the middle and at the end.

**Employee Training** – Employee hygiene is extremely important. Training is essential.

Maintain a training log signed or marked by the employees, on an annual basis. If you

can't capture all workers in your pre-season training session, encourage trusted, trained workers to pass on their training to others. Also, put up the handwashing and related posters available through Mid American Ag and Hort Services in as many places as possible.

**Pest Control** – Rodents, insects and animals are still capable of infecting humans with disease. Effective pest control includes minimizing the opportunity for pests to enter packing and storage facilities, as well as, being set up to quickly trap and remove any rodents that do get into your buildings. Outside: keep the perimeter of the buildings free of debris which could harbor rodents and insects and set up rodent stations (preferably poison free) on either side of doorways and along the perimeter. Inside: also set up rodent stations on either side of doorways and along the perimeter (definitely poison free). Make a map of the location of all of the rodent stations and keep a log for weekly checks of the rodent stations.

**Traceback/Recall** – Having a printed lot code on each bag, or sale unit (i.e. bin) should be enough to get a passing score as long as you maintain a record (via the shipping log, invoice or similar documentation) that will identify to who you shipped that lot code of product.

**Storage Temperatures** – Maintaining cool storage temperatures is critical for reducing the potential of microbial growth on or in produce. If you aren't set up with automatic recorders that can provide you with a record of storage cooler performance, then it will be necessary to maintain a written log of cooler temperatures. Begin with a once a morning check and increase if you can.

**Audit Yourself** - For most buyers a passing score of 70% or greater is needed to qualify as an approved supplier. Good housekeeping and particularly maintaining clean equipment will go a long way toward achieving that passing score. Also remember that the goal is to achieve 70% or higher in each section, not just on an overall basis. In order to have a better feeling for how you would do in an audit. Download a copy of the USDA audit matrix (<http://www.ams.usda.gov/fv/fpbgapghp.htm>) and use it to audit your operation. That will give you an idea how you would do in a real audit and some direction regarding what you could improve to reach a passing score.

And for Indiana and Ohio fruit and vegetable producers who could use a little help with all of this, feel free to contact us at the Ohio and Indiana Specialty Crop Food Safety Initiative by calling Mid American Ag and Hort Services at 614-246-8286 or emailing us at [maahs@ofbf.org](mailto:maahs@ofbf.org). We are funded by the United States Department of Agriculture's Risk Management Agency to provide free materials regarding GAPs, as well as free on-farm consultations through September 2006. Visit us at [www.midamservices.org](http://www.midamservices.org) and select "Projects" from the list on the left side of the page.

**Too Few Leaves on my Blueberry Bushes!** By Becky Grube, University of New Hampshire (Source: University of Massachusetts Berry Notes Volume 18 #9)

Several blueberry growers around the state have been reporting that their bushes have fewer leaves than normal. The leaves did not fall off – they never formed to start with. In some cases, the entire bush may be affected, but it's usually only select canes. Those canes or bushes that have very few leaves tend to have abnormally heavy fruit set. Those with lots of leaves have comparatively few fruits. What's going on? During the growing season, the blueberry bush forms buds for the next year – in spring and early summer, it makes the buds that will be leaves, and in late summer it makes the buds that will become fruits. Heavy fruit set this year means that the bush made a lot of fruit buds last year. They do this when they have excess energy to go around, which many did last year because yields were light (in part due to the mummyberry disease) so they were not spending energy ripening fruit. If a branch has lots of fruit buds from the previous year, it pours its energy into setting fruit, and NOT into producing leaves. Blueberry bushes preferentially pour energy into fruit rather than leaves. This is why we see branches that have either lots of fruit OR lots of leaves, but not both. An aside: Pruning during the winter can bring the fruit and leaf buds into balance for the bush. One grower reported to me that they had left some of their 'Bluetta' bushes unpruned last winter. The bushes that had NOT been pruned have very heavy fruit set and very few leaves, whereas those that had been pruned had a better balance between fruit and leaves. Another complicating factor: winter injury can weaken canes slightly without actually killing buds. These weakened canes have less energy overall, so this problem may be more apparent on exposed canes or older canes that were more susceptible to winter injury.

Why is this a problem? If a bush (or a cane) doesn't have very many leaves, it cannot produce the energy it needs in order to ripen the berries. So even though there are many berries, the berries will likely be undersized, and will not be very sweet, if they ripen at all. Further, the bush will not have excess energy to pour into either 1) next year's fruit buds or 2) the root system, strengthening it for the coming winter. This will stress the plant, or at the very least, the cane in question.

What to do? The objective is to ripen and harvest as much of the current fruit set as possible. A couple of suggestions that may help: Fertilization: Due to the amount of rain we had earlier in the season, some of the nitrogen applied earlier in the season may have leached away and was not taken up by the bushes. A soil application now of 50-75 lbs ammonium sulfate (10-15 lbs actual nitrogen) would ensure bushes have adequate fertility. Bill Lord, former UNH fruit specialist, says that he has had success stimulating leaf cover with two foliar sprays, 7-10 days apart, of LB urea at a rate of 3 lbs/100 gallons of water. Caution: Foliar sprays should not be applied the day after a long period of rain or if air temperatures are over 80F, to avoid burning plants.

Fruit removal: Depending on the severity of the problem, you may want to do some selective pruning to reduce the fruit load now, before the fruits get any larger. This may be more important for young bushes (<3 years), where significant stress could limit future plant growth. Fruit removal will increase the quality of the berries you do have.

It will also reduce the stress on the plant, and increase potential yields next year. Judging how much is 'too heavy' is subjective, but it's probably too heavy if you are already seeing that berries are smaller than you would expect (or than on other canes). You will

have to balance the labor required to remove fruit with the potential benefit in yield, both this year and next. It's important to remember that even though you are cutting off fruit, these fruits will not likely ripen properly, and so you will not be losing profits. If not removed now, these canes should certainly be removed in the next pruning cycle. Caution: IF you decide to prune now, make sure to sanitize shears frequently (i.e. between bushes) with a 10% bleach solution or specialized nursery or greenhouse disinfectant to prevent transmission of viruses or other diseases!

A caveat: Too few leaves are a general sign that the bush is experiencing any number of stresses. One such stress is winter injury, but it could also be caused by nutritional problems, root damage, insects, diseases, improper pH, etcetera. Trying to determine the source of the underlying stress is important to help manage it in future years. (Reprinted from Massachusetts Berry Notes June 30, 2005)

## **SW Michigan Fruit Report June 20** - Mark Longstroth

**Apricot** fruit are 2 inches in diameter. **Peach** fruit are 1.75 inches in diameter. Growers are still hand thinning. Large oriental fruit moth larvae are being found. The second generation of OFM should be emerging this week. Growers and scouts should recharge their lures for this flight. Peach fruit show tarnished plant bug damage and rusty spot (powdery mildew). Bacterial spot is generally minor. **Sweet cherry** harvest has begun. Birds have been a big problem this year and growers have lost a great deal of fruit. Fungicides to control brown rot should be applied. Cherry fruit fly traps should be out, especially where sweet and tart cherry varieties are grown together. **Tart cherries** are turning red and growers will be applying Ethrel this week. Growers need to protect against cherry leaf spot. Cherry leaf spot has been reported in orchards where DMI fungicides Indar were used, indicating that resistance was the issue and not poor application timing. Cherry fruit fly are seldom a serious problem in SW Michigan in areas where only tarts are grown, the flies seem to emerge late at about harvest time and develop in fruit left on the trees. In **Plums** the crop looks decent. Shoot growth continues and growers need to protect against black knot. White apple leafhoppers are causing stippling of the leaves. **Apple** fruit drop continues. The fruit are about 1.25 inches in diameter. We have had 248 hours of leaf wetness since petal fall so sooty blotch and flyspeck symptoms should show up in unsprayed orchards soon. Growers need to maintain scab protection if they find leaf lesions in their orchards. Growers should continue to protect against powdery mildew in problem orchards. Fire blight symptoms and bacterial ooze are not common but some orchards are showing more symptoms. Trauma blight could be a problem if we get severe weather in these orchards with oozing shoots. Oriental fruit moth is between generations. Codling moths trap counts are down but egg hatch continues. Many growers are applying the second cover spray. Obliquebanded leafroller are being caught in the area. Biofix for Obliquebanded leafroller occurred last week on Monday June 12 at 1150 GDD base 42. European red mites eggs are being found. Apple maggot traps should be out.



## Small fruit

**Blueberry** fruit are beginning to color in early varieties. Weymouth harvest will start later this week in Berrien County. Protection against anthracnose fruit rot should be the main disease concern now. Cane collapse due to phomopsis is occurring. Cherry fruitworm and cranberry fruitworm are being caught in pheromone traps this means egg laying is continuing. Blueberry Maggot will be emerging soon and traps should be out. In **Grapes**, fruit clusters on primary shoots are at shatter and clusters on secondary shoots are blooming. Rose Chafers are feeding in some vineyards. Post bloom sprays are due. Grape berry moth numbers are high. Grape flea beetle larvae are feeding on the leaves in unsprayed vineyards. Some growers are still deciding if they will harvest. Phomopsis leaf lesions are common in most plantings. **Strawberry** harvest will probably end at the end of the week. Fruit has ripened rapidly due to the heat last week and fruit size is falling off. Fruit quality has been good. Irrigation is important to maintain good fruit size. We expect renovation to begin early next week. **Raspberry** harvest will begin soon. Growers should be scouting for Japanese beetles. Pre harvest fungicide and insecticide sprays should go on soon.

## Coming Events -Art Agnello SCAFFOLDS Fruit Journal, Volume 15, No. 14

COMING EVENTS Ranges (Normal +/- Std Dev):	43F	50F
American plum borer 1st flight subsides	1163-1549	698-1032
Apple maggot first catch	1191-1597	750-1034
Lesser appleworm 1st flight subsides	950-1436	570-920
Obliquebanded leafroller 1st flight peak	943-1313	565-827
Obliquebanded leafroller summer larvae hatch	1038-1460	625-957
Oriental fruit moth 2nd flight begins	1272-1564	784-1020
Peachtree borer 1st catch	770-1358	439-841
Pear psylla 2nd brood nymphs hatch	967-1185	584-750
San Jose scale 1st generation crawlers present	1033-1215	619-757
Spotted tentiform leafminer 2nd flight begins	952-1184	560-740

NOTE: Disclaimer - This publication may contain pesticide recommendations that are subject to change at any time. These recommendations are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Due to constantly changing labels and product registrations, some of the recommendations given in this writing may no longer be legal by the time you read them. If any information in these recommendations disagrees with the label, the recommendation must be disregarded. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author and Ohio State University Extension assume no liability resulting from the use of these recommendations.

## Ohio Poison Control Number

(800) 222-1222  
TDD # is (614) 228-2272