Fruit Notes

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Cornell Cooperative Extension
Lake Ontario Fruit Program

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Summer Pruning of Stone and Pome Fruits

Mario Miranda Sazo

Summer pruning of Sweet Cherries: The dry mid-summer period immediately after harvest is a great time to summer prune sweet cherries. Pruning should be done during dry periods which allow cuts to dry out or heal before rain. The key to pruning is to leave a 6-12 inch heading stub (no flush cuts!) to reduce the movement of bacteria into the trunk or main limbs and to leave vegetative buds for regrowth of a new branch. Recent research done at Geneva showed that pruning cherries after harvest during dry, summer weather significantly reduced the likelihood of bacterial canker infections. It found that (1) copper applied immediately before and after pruning did not reduce bacterial canker infections, (2) cherry trees generally are so vigorous that removal of some wood does not affect carbohydrate accumulation for the winter and following season, (3) judicious summer pruning can improve the light environment within the tree strengthening fruit buds and possibly improving next year's bloom and fruit set. Research done in the west has shown that summer pruning reduced the overall vigor of the tree but did not affect subsequent yield or fruit size. This means that summer pruning is especially beneficial for overly vigorous trees. At this time it is easy to see bacterial canker infections that can be easily removed potentially reducing the potential for infections next spring. Immediately post–harvest is also the very best time to reduce tree height. Large cuts made in the tree top result in very little regrowth and any resulting winter injury has very little impact on the health of the tree. A single large cut at the desired tree height can contain tree height for up to 3 years.

The style of summer pruning used depends on sweet cherry tree architecture. Dormant cuts made into 1 year old wood generally result in the production of 3 new shoots. Usually 2 are laterally placed (flat) while the third is upright. Simply removing the upright will sufficiently open the tree and allow much improved light penetration to the interior fruiting wood. Allowing a small stub to remain can increase the number of cherries since fruit buds generally form at the base of one year old wood. Leaving stubs might be an excellent practice for shy bearing varieties such as Regina, Ulster, and Attika. Shoots should be completely removed on cherries that bear excessively such as Whitegold, Rainier, and Sweetheart. Another reason to leave stubs is to limit the potential spread of bacterial canker on extremely susceptible varieties.

You can follow this summer pruning with a light touch-up late next spring to eliminate any winter-killed branches and to make crop load adjustments.

Summer pruning of Peaches: To keep shoots growing in the lower portion of the tree they must receive adequate light after harvest. This requires removing upper branches that shade the interior of an open center tree or a V-tree. Prune out most, if not all of the vigorous upright growth in the tree, which shades the lower half of the tree. Prune it all the way to where the branch originates. Keep good light exposure to the bottom of the tree by removing vigorous and upright interior growth. Limit the height of the tree by heading tops of scaffold arms maintaining approximately 10-12 feet in height and keeping tops very narrow and approximately in line with the main trunks by removing all large wood in the top facing in the row.

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Summer Pruning of Apples:

Do not summer prune apple trees until they have filled their allotted space. Pruning immature trees in the summer will help induce enhanced color but will set back tree growth and future yield potential for that block. If your trees appear to need summer pruning before filling the allotted space, then one or more of several mistakes have been made. (1) Trees have been set too far apart and they have reached mature growth habit without filling their space. (2) There has been excessive and improper winter pruning with too many heading back cuts and too few thinning out cuts. (3) Excessive vigor was encouraged by excessive fertilization.

Start summer pruning after the terminal bud shoots have stopped growing. By waiting, you will prevent "witches broom" growth from occurring near the cut and will reduce the risk of winter injury resulting from excessive late shoot growth. Determining actual terminal bud set is difficult. Many times buds appear set then start to grow after a rain. Judge terminal bud set on lateral and terminal shoots, not on upright suckers produced on the top of horizontal scaffolds. August 1st in WNY is a good rule of thumb date but many blocks can be started much earlier.

It is best to wait as late as possible before summer pruning. Delayed pruning reduces the potential damage from hail in late summer storms. Fruit exposed by summer pruning is much more susceptible to damage by even light hail. In years with high light, sunburn can be a problem on fruit suddenly exposed by summer pruning.

Generally, early maturing varieties should be pruned first. These normally shut down growth first. Summer pruning will still result in good coloring of Jersey Mac's even with little more than a week before the first pick. Remember, there is always considerable block to block variation. Check each block since differences in weed control, soil type, and fertilizer programs can all influence the time of terminal bud set. Varietal response will also influence your order of pruning. Idareds and Jonagolds can be pruned early and may reduce sunburn. Sunburn on these varieties appears to be worse when tender, more mature apples are suddenly exposed to direct sunlight. Younger apples appear to be more resistant. Therefore, prune this variety relatively early in the schedule. Jonagold appears to fail to properly mature in blocks where heavy summer pruning is performed early so do not over-prune.

Do as little cutting as possible when summer pruning. Always keep the objective in mind when pruning. If your objective is to improve light interception and fruit color, limit pruning to the removal of limbs and foliage that prevents light from reaching the fruit. Excess removal of foliage will weaken the tree and may harm the fruit's ability to mature. If your objective is to contain tree size, cut back to weak side limbs or fruiting spurs just as you would in the winter on those same branches. Don't be afraid to remove some apples. Remember that if you are making the proper cut for color there will be better apples underneath.

Cut into two year old or older wood. Cutting into one year wood will induce "crow's feet", unwanted late growth, and increase susceptibility to winter injury. A good rule of thumb is to cut back to the first apples on spur type varieties, and past the first apples on terminal bearers.

Be extremely careful with the wood removed from the tree. Careless summer pruning can be "worse than a hail storm". There are very few cases where summer pruning can be justified when a ladder is used. First, it is too expensive. Secondly, the risk of dropping brush through the tree and bruising fruit is too great.

Online Registration Now Open for 2018 CCE LOF Hispanic Summer Fruit Tour

Mario Miranda Sazo

The CCE LOF team is organizing the 4th annual Hispanic Summer Fruit Tour to be held in Wayne County from **1:30pm until 5:30pm** on **Saturday August 25th, 2018**. In addition to the traditional horticultural stops to be hosted by Adan Aguilera from VanDeWalle Fruit Farm along with Hormisa Bellona & Ignacio "Nacho" Onofre from Teeple Fruit Farm, some of the tour activities will continue gathering feedback from Hispanic orchard workers on skills they need to improve within their fruit farm business for greater success and job satisfaction. There will be small group activities to reinforce topics related to supervision and better communication. Because some orchard workers

have expressed some skill deficiency with understanding workplace culture on Western NY fruit farms, there will be specific examples of how to work efficiently. The importance of punctuality, work ethic, and commitment will also be highlighted.

For more details about this educational opportunity and how to register, please review Mark Your Calendar, at the end of this newsletter or register online at https://lof.cce.cornell.edu/event.php?id=982

Late-season Pest and Disease Update

Tessa R. Grasswitz

General notes

- As harvest approaches, pay particular attention to pesticide pre-harvest intervals, seasonal use limits and any market-specific restrictions on particular active ingredients.
- For pests with multiple generations per season (e.g. codling moth, oriental fruit moth, etc.), keep in mind the need to rotate between different chemical classes (different IRAC numbers) for each generation to reduce the risk of resistance development.
- At harvest, make a note of problems associated with particular blocks, and use this to inform and revise your pest management plans for next year. Fruit damaged by San Jose scale, for example, are particularly noticeable at this time of year (right) and can serve as a valuable warning of sites where populations are starting to build-up.
- Now that we are finally getting some much-needed rain, keep in mind the rainfastness of different products on various fruit crops. A useful guide is available on-line from Michigan State University at: http://msue.anr.msu.edu/news/rainfast_characteristics_of_insecticides_on_fruit (Note that product registrations are state specific: some products registered in MI may not carry the same approvals in New York).

Brown Marmorated Stink Bug (BMSB). Catches at our monitoring sites remain low. However, increased movement of adults into orchards can be expected from now until harvest. Keep in mind that this pest can feed on more than a hundred different host plants, including various field crops (e.g. corn and soybeans), several vegetable crops, and numerous wild and ornamental hosts. Adults migrate readily from such hosts to orchards as crops mature. Blocks next to soybeans (a preferred host), for example, may see numbers increase as the latter approach harvest.

Similarly, hedgerows or woodlots that include highly preferred wild hosts (such as buckthorn, wild raspberry, or multiflora rose) may increase the risk to perimeter rows of adjacent orchards. Peaches, apples and pears are all susceptible. Most BMSB damage to pome fruit occurs in August and September, and feeding in the last few weeks before harvest may not be apparent until the fruit is in storage. Stinkbug feeding on maturing apples causes corky, necrotic tissue close to the skin surface. This late-season damage can look similar to bitter pit on the surface, but can occur anywhere on the apple, rather than being concentrated at the calyx end of the fruit. Cutting vertical sections through suspected damage can reveal a narrow brown 'salivary sheath' left by the insect's mouthparts as it probes the fruit.

Growers are advised to use monitoring lures and traps (available from Great Lakes IPM* and other suppliers) and to intensify on-site scouting for this species. Traps should be placed in perimeter rows (particularly those bordering woodlots), with one or two in the orchard interior as well. A density of approx. 6 traps per 10 acres has been suggested, particularly for blocks with a history of problems with this pest. Traps should be checked at least once per week, with the suggested action threshold being a cumulative catch of more than

10 adults or nymphs (re-setting to zero when an insecticide is applied). Visual scouting is also invaluable with such a mobile pest. BMSB injury to apples tends to be greatest in fruit in the upper canopy of trees in border rows, so pay particular attention to such sites when checking for damage.

Effective control options are limited, with some products having long pre-harvest intervals (particularly in pome fruits). In planning for BMSB management (should it be necessary), note that a FIFRA Section 18 Specific Emergency Exemption has recently been granted for the use of Bifenture 10DF Insecticide/Miticide (EPA Reg. No. 70506-227), Bifenture EC Agricultural Insecticide (EPA Reg. No. 70506-57), and Brigade WSB (EPA Reg. No. 279-3108) to control brown marmorated stink bug on apples, peaches, and nectarines in Niagara, Orleans, Monroe, Wayne, Columbia, Dutchess, Orange, and Ulster counties in New York State. These emergency exemptions are valid through October 15, 2018. Users must have a copy of the appropriate Section 18 exemption in their possession at the time of use and must follow all applicable directions, restrictions, and precautions on the primary product label. Copies of the approved Section 18 labels are available at the DEC NYSPAD product registration website (http://www.dec.ny.gov/nyspad/products). If repeated applications are needed, try to rotate to a different active ingredient for resistance management purposes.

Oriental fruit moth. The third adult flight has begun at some of our warmer monitoring sites. At this time of year, the suggested action threshold for this species in both peaches and apples is an average of 10 or more adults per trap per week. Keep in mind that the suggested timing for insecticides targeted at the larvae before they enter the fruit is at 2250–2280 DD (Base 45 °F); given the current and predicted temperatures, this should occur towards the end of this week or early next week: check the NEWA degree day calculator tool (using the nearest/most appropriate weather station and your own biofix data) to check current accumulations. Rotate to a different chemical class to that used to manage previous generations, and consider including a product such as Madex HP in your tank mix. The latter product is based on a granulosis virus that is highly specific to oriental fruit moth and codling moth, and which can complement the effects of conventional products (e.g. by reducing the overwintering survival of infected larvae), contributing to long-term population reduction.

As we head into harvest, keep in mind that mature larvae of both codling moth and oriental fruit moth can emerge from infested apples while in the bins (prior to entering storage) and pupate in cracks and crevices in the bin structure. These unwelcome and unseen stowaways can emerge next spring wherever those bins are stored and infest adjacent apple crops. It is no coincidence that growers tend to encounter problems with these 2 species in blocks adjacent to sites where bins are stored.

Obliquebanded leafroller. The second adult flight is just beginning. Larvae from this generation will feed for a short time on either leaves or the surface of fruits (often under the shelter of a leaf, or where two apples are in contact), before moving to protected sites on scaffold limbs to form silken 'hibernacula' in which to overwinter, emerging next spring. 'Pin-hole' fruit damage caused by the young larvae (small holes in the skin) may not be readily apparent at harvest, but may become more obvious in storage as the fruit flesh starts to decay. At this time of the season, larval distribution can vary with tree size and type: on larger trees, populations tend to be denser towards the top of the canopy. Control at this time of year is more difficult than in early spring or for the first summer generation. Products based on *Bacillus thuringiensis* (Bt) (e.g. Dipel, XenTari, etc.) can be applied up to harvest and can be effective if applied at approx. 7-day intervals starting approx. 10 days after the first adult trap catches.

Apple maggot. Adult emergence is continuing, triggered by recent rains that make it easier for the pupae to emerge from the soil. Continue to check traps once or twice per week for adult flies, especially in blocks with a previous history of this pest, or if there are abandoned orchards or other untreated host trees nearby. Maintain protection if numbers exceed the suggested action threshold of 5 or more adults on red sphere traps per week.

Spotted wing drosophila. While most of the more susceptible fruit crops are winding down, keep in mind that at this time of year spotted wing drosophila populations are at (or approaching) their height. Maintain insecticide coverage on ripe fruit susceptible to attack and continue frequent and thorough harvesting to help slow the rate of

population build-up. Rapid cooling of harvested fruit will slow development of any eggs or small larvae present in harvested fruit. Detailed information on the insecticides currently registered in NY for this pest are available, by crop, at: http://fruit.cornell.edu/spottedwing/management/ : use products with the highest efficacy rating, maintain tight spray schedules, and rotate between different chemical classes to reduce the risk of insecticide resistance developing. Keep a close eye on pre-harvest intervals, seasonal use limits, and any particular market restrictions.

High numbers of adult **Japanese beetles** (left) are still being seen, posing a potential threat to young fruit trees and maturing soft fruit. While there is no established threshold for this species in most fruit crops, keep in mind that their more preferred fruit hosts include Honeycrisp apples, Bluecrop blueberries and Chinook and Heritage raspberries. Pay particular attention to these cultivars when scouting.

Ripening **peaches** and **nectarines** that are injured by Japanese beetles, birds, etc., are more susceptible to **brown rot**, which is favored by warm, wet conditions. Fruits thinned after pit hardening can become infected on the orchard floor and provide inoculum for the fruits remaining on the tree, further increasing the risk to ripening fruit. For late peaches and nectarines, fungicide options include Indar and Luna Experience (amongst others). In choosing products, keep in mind those used earlier to control blossom blight, as well as pre-harvest intervals, the need to rotate between different chemical classes for resistance management, and any product-specific seasonal use restrictions (see individual labels for details).

Sooty blotch and flyspeck are favored by extended periods of above-average temperatures combined with rainfall and high humidity. Inspire Super, Flint, Sovran, Topsin M, Merivon or Pristine can arrest development of infections on fruit if applied after infection has occurred, but the fungi will resume growth once the residues are depleted. Under disease-conducive conditions, regular and thorough coverage is needed to maintain protection. Keep in mind seasonal use restrictions, pre-harvest intervals and market considerations/restrictions for specific products (Topsin M, for example, is not acceptable for some markets).

Our current weather pattern of rain, high humidity and warm temperatures is highly favorable for the development of **bitter rot** (to which Honeycrisp seems to be particularly susceptible). As apple harvest approaches, maintain protection against this and other **fruit rots** (i.e., **black and white rots**), keeping in mind that late season infections on apparently healthy fruit can become apparent later in storage. Fungicide options include Luna Sensation and Merivon (amongst others): check previous applications to ensure that seasonal use restrictions are not exceeded.

In **blueberries**, now is a good time to scout for **mummy berry** as an early warning for next spring. At this time of the season, infected 'mummified' berries shrivel and turn pinkish in color and become filled with an internal hard gray/white fungal mass. Eventually they fall to the ground, shrivel up and turn dark brown or black. These infected fruits will serve as an inoculum source for subsequent infections next spring. If found, take note to implement an infection prevention program next year.

Resources

*Great Lakes IPM: E-mail: glipm@greatlakesipm.com Website: https://www.greatlakesipm.com Telephone: (989)-268-5693 or (989)-268-5911

Cornell AgriTech' Reflects Influence in Food, Ag Innovation

Erin Flynn, CALS - CCE, Extension Insider

Figure 1: The College of Agriculture and Life Sciences (CALS) announced Aug. 1st the renaming of the New York State Agricultural Experiment Station (NYSAES) to Cornell AgriTech (photo by M. Miranda Sazo)

Agriculture and food are multibillion-dollar industries in New York, and the name change underscores the value Cornell AgriTech brings to improving the health of the people, environment and economy of the state and beyond. Based in Geneva, New York, Cornell AgriTech is home to more than 300 faculty, scientists, staff and graduate students at the leading edge of food science, entomology and plant sciences research.

"Cornell AgriTech is an essential part of Cornell CALS and supports our mission of discovery that grows the agricultural economy in New York and makes food more nutritious, safer and better tasting for everyone," said Kathryn J. Boor '80, the Ronald P. Lynch Dean of CALS. "Cornell AgriTech is a global leader in food and agriculture research and innovation, as our scientists generate the breakthroughs and develop the technologies that improve the crops in our fields and the food on our plates."

The New York State Legislature granted 130 acres in Geneva on June 26, 1880, to establish NYSAES. Researchers were charged with advancing scientific discovery and rapid communication of results to benefit the farmers and consumers of New York. The station became part of Cornell in 1923. Since then campus innovations have translated into new methods and technologies for growers and solutions that help farmers and businesses thrive. Cornell scientists have developed more than 280 new varieties of fruits and vegetables, pioneered insect attractants for pest control, and invented ultraviolet pasteurization and the gene gun to improve crops.

Today, Cornell AgriTech has expanded to more than 900 acres of fields, orchards and vineyards led by scientists dedicated to delivering solutions to farmers and business and propelling economic development in New York. With 12 research farms and 17,500 square feet of greenhouse space, Cornell AgriTech is a global leader in research, technology and education focused on food and intensively cultivated crops, with a major emphasis on fruits and vegetables. Researchers are also pioneering the study of plants that are engines of the future, from sources of bioenergy to emerging crops like industrial hemp that offer promising opportunities for growers in New York.

"Cornell AgriTech scientists continue to be on the cusp of new research, discovery and innovation, working together across disciplines to reimagine the future of food and agriculture systems in New York State and beyond," said Jan Nyrop, the Goichman Family Director at Cornell AgriTech and associate dean at CALS.

New York is a farming state. More than one-fifth of the state's land is dedicated to agriculture, and it contributes nearly 200,000 jobs and more than $37 billion in economic activity to New York. The state is one of the nation's largest producers of apples, berries, grapes, onions, sweet corn, tomatoes, maple syrup, farm-based beverages like beer and wine, and a wide variety of other fruits and vegetables.

Researchers at CALS and Cornell AgriTech rigorously evaluate the profitability of production systems for diverse crops. Outreach is a major driver of activities at Cornell as part of

its land-grant mission to bring knowledge directly to growers. Cornell AgriTech provides the latest research to New York farmers to improve their ability to adapt to changing environmental and economic conditions.

“Cornell’s New York State Agricultural Experiment Station has long been recognized as a powerhouse of innovation, supporting the growth of the agricultural community in New York State and providing the research that drives the future of agriculture,” said Richard A. Ball, commissioner of agriculture at the New York State Department of Agriculture and Markets. “I congratulate Cornell and its talented scientists and researchers on their accomplishments over the years and this exciting next chapter as Cornell AgriTech. The team at Cornell AgriTech will no doubt continue to impact our economy, paving the way for new opportunities for our farmers, enhancing the competitiveness of New York’s producers, and increasing the long-term success of the state’s agricultural industry.”

New York food manufacturing has been growing nearly 10 percent annually in recent years, and the industry supports more than 52,000 jobs in the state. Cornell AgriTech is a leading research and information hub for food manufacturing and safety. Since 1988, the Cornell Food Venture Center has helped more than 13,000 food entrepreneurs commercialize more than 20,000 products, while the Institute for Food Safety at Cornell supports the production of safe and novel foods that increase the economic viability and sustainability of the food industry in New York and beyond. The new Center of Excellence in Food and Agriculture at Cornell AgriTech will work to accelerate business development and grow the New York agriculture and food economy.

School of Integrative Plan Science (SIPS) plant breeders based at Cornell AgriTech are working with some of the most popular food crops to improve flavor and nutrition and breed plants optimized to climatic conditions. The apple breeding program led by Professor Susan Brown is one of the largest fruit breeding programs in the world, releasing 65 apple varieties including recent favorites RubyFrost and SnapDragon. The berry breeding program at Cornell AgriTech is the oldest in the United States, with more than 100 berries released in its history. Berry breeder Courtney Weber, Associate Professor of horticulture, has released numerous strawberries and raspberries in recent years, breeding for bold flavors and colors that resonate with consumers while meeting the needs of growers and helping support New York’s $20 million berry industry.

Cornell AgriTech experts in entomology, plant pathology, horticulture and plant breeding have been critical partners in establishing New York as a leader in grape and wine production. The grape breeding program directed by Professor Bruce Reisch '76 has introduced 58 varieties of table and wine grapes, contributing tens of millions of dollars annually to the state economy.

At the same time, Cornell AgriTech scientists are looking to future food crops that will thrive in New York and along the East Coast. The Eastern Broccoli Project spearheaded by Professor Thomas Björkman is working to create a $100 million broccoli industry that supports a year-round supply of quality, eastern-grown broccoli for East Coast markets.

“Our mission, simply put, is to grow things,” said Nyrop. “Our newly established identity will propel us forward as we work to grow knowledge, new techniques, new technologies, and the industries, economy and people they support.”

NextGen Fruit Growers Visit Adams County, PA, on their 2018 Study Tour

Mark Wiltberger

The Lake Ontario Fruit Region NextGen Young Fruit Growers visited Adams County, PA, for three days in early August on their annual Study Tour.

From August 2 – 4, the NextGen growers visited orchards, a cidery, a food processing facility, a fruit packing facility, and a Penn State research station. In addition to growers from the Lake Ontario Fruit region, the group was joined by growers from the Hudson Valley, the Champlain Valley, western Pennsylvania, and Ontario, Canada.

NextGen LOF Young Fruit Growers Jacob Wafler, of Wafler Orchards and Nursery, Wolcott, NY, and Andrew Reid, of KC Bailey Fruit Farm, Williamson, NY, talk pruning strategy with Blake Slaybaugh of Mt. Ridge Farms, Biglerville, PA, and the Young Growers Alliance.

The tour was hosted by the Young Growers Alliance, based in Pennsylvania, a group with a similar mission to the NextGen group. Their aim is to create educational opportunities for a network of young growers.

The group visited Three Springs Fruit Farm, where Ben Wenk spoke about the orchard operation and also what they have learned about growing hard cider apple tree varieties and producing hard cider under their Ploughman Cider label.

At Hollabaugh Bros. Fruit Farm and Market, the group learned about the wholesale and retail fruit production, the destination farm market, and the educational mission of the farm.

At Mt. Ridge Farms, the group saw a wide range of planting systems, varieties, and rootstocks employed, and also learned about the discovery of the very first Premier Honeycrisp tree on the farm by Dave Slaybaugh.

At the Penn State Fruit Research and Extension Center (FREC), Dr. Greg Krawczyk, Dr. Kari Peter, and Dr. Tara Baugher reviewed the latest research being conducted at the Center.

The group had dinner Thursday night at the Ragged Edge Coffee House in Gettysburg. Sara Lott Zost, co-chair of the Young Growers Alliance, spoke about how their group is organized and what types of activities they conduct. Carla Snyder, Penn State Extension Agricultural Entrepreneurship & Marketing Educator, spoke about the hard cider industry in Pennsylvania, and conducted a tasting of local hard ciders, including the “Stark” cider crafted by Ben Wenk of Ploughman Cider and Three Springs Fruit Farm, who had hosted the group earlier in the day.

On Friday the group lunched and sampled cider at Thirsty Farmer Brew Works. Manager Kevin Knouse spoke about their business vision and also gave a tour of the famous Historic Round Barn and Market.

The groups toured one of the Knouse Foods facilities. On the day of the tour, the group saw fresh cherries received and ultimately packaged as cherry pie filling, and also sampled cherry and peach pie filling with the quality control managers in the laboratory.

The tour finished with a visit to Rice Fruit Company. After touring the facility and seeing the new packing line expansion, the group listened to Ben Rice, President, and Leighton Rice, Quality Control Director, speak about the environmentally-friendly roof technology, and their vision for the company and what they are looking for from growers in the coming year.

In addition to the Young Growers Alliance, the tour was made a success with considerable help from Don Seifrit, Tara Baugher, and Carla Snyder, of Penn State Extension, all of the generous businesses in Adams County who hosted the group visits, and the numerous Sponsors of the 2018 NextGen Tour and additional LOF summer meetings. Mark Wiltberger, business management specialist of the Lake Ontario Fruit Program, and Matt Wells, of NY Apple Sales, also participated and helped organize the tour.

Stay tuned for future activities of the NextGen Fruit Growers. After the visit with the Young Growers Alliance, participants had a number of ideas for possible activities for the group.

Harvest Maturity Update

Craig Kahlke

Preparing for Harvest:

Now is the time to find your pressure testers (penetrometers) and refractometers (brix) testers – for possible suppliers, or to order new ones check the following links-for Wagner Instruments pressure testers: http://www.fruittest.com/ or for refractometers, try Atago USA: http://www.atago.net/USA/products.html or Frostproof: http://frostproof.com/fruit-testing/ (they have refractometers & pressure testers) or Wilson Irrigation has lots of testing equipment: http://www.wilsonirr.com/ecommerce/testing-equipment.php

- Get a notebook to record your testing results.
- **Iodine -** Is last year's iodine still any good? Iodine can be stored for up to two years. It should be stored in an opaque container, out of sunlight in a cool dry place. If any holdover supplies last year did not receive proper storage, it is best to buy new. We will be stocking iodine solution in local extension offices of Wayne, Niagara, and Orleans over the next few weeks in the 1 pint ($8.00) size. If you want large quantities, please call or email Craig (585-735-5448, cjk37@cornell.edu) to order by the gallon ($40.00). Starch charts are also available free of charge at the same locations.

Overall Maturity Issues:

- I will begin looking at Paula Red, Ginger Gold, Zestar, Premier Honeycrisp, and Bartlett pear later next week to gage where we are on maturity. The first HMR will be send on Friday, August 24. **Best guess at this point is at or slightly earlier (just a few days) than normal.**
- **Subscribe Now for Harvest Maturity Reports!** The harvest maturity reports (HMR's, aka Harvest Facts) are emailed or faxed weekly, and provide critical harvest maturity of apples and pears. The HMR's comprise regional maturity testing of many blocks of fruit, including internal ethylene, the only true measure of maturity. The testing data is shared with experts and key maturity issues are included within the HMR's. To subscribe please click here for the form to print and mail with a check on our website or print the one below.

Harvest Maturity Report Subscription – Mail In Option

Please print and submit this form with a check for $60, ($100 for those who live and farm outside of Monroe, Niagara, Orleans, Oswego and Wayne counties) made payable to "Cornell Cooperative Extension"

And mail to: Orleans County CCE
Attn: Kim Hazel
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Albion, NY 14411

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Name _____ Email_____

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Mark Your Calendar

Meeting title	**Flore/Perry Symposium**
Date	*Friday, August 24th*
Time	*8 AM – 8 PM*
Location	*Hagerty Center at Northwestern, 715 E. Front Street Traverse City, MI 49686*
Cost	$75 for symposium, lunch, wine reception, and dinner; $35 for wine reception & diner only, $50 for symposium & lunch only
Brief description of meeting	**Celebrating Forty Years Advancing Fruit Production: Applied Physiology, PGRs, Rootstocks, and Orchard Systems" to honor the retirements of Professors Jim Flore and Ron Perry.**
Registration/Contact for information	Register online by August 17 at https://events.anr.msu.edu/event.cfm?eventID=9E2DD34A329BFA31 Todd Einhorn (einhornt@msu.edu) & Greg Lang (langg@mu.edu) - Symposium Convenors Meghan Hill (hehrerme@msu.edu), Greta McKinney ((mckin134@anr.msu.edu) - Symposium Travel and Arrangements Coordinators, respectively

Meeting title	**2018 CCE LOF Hispanic Summer Fruit Tour**
Date	Saturday August 25
Time	1:30pm-3:00pm (VanDeWalle Fruit Farm, 9095 Ridge Road, North Rose, NY 14516) 3:15pm-5:30pm (Office and storage facilities at Teeple Fruit Farm, 5975 Lake Bluff Rd, North Rose, NY 14516)
Location	Touring 2 farms in Wayne County
Cost	Free, but a pre-registration is required for ice cream count by Wed. August 22 (online registration now open for this event, see below)
Brief description of meeting	There will be a tour of modern high density plantings to understand how the trees were established, trained, and pruned by tour host Adan Aguilera of VanDeWalle Fruit Farm. A discussion and training about supervision, communication, and workplace culture will be conducted with tour hosts Hormisa Bellona and Ignacio "Nacho" Onofre of Teeple Fruit Farm. Activity will be guided by Mary Jo Dudley, Director of Cornell Farmworker Program
Registration/Contact for information	Register for this event at: https://lof.cce.cornell.edu/event.php?id=982 For additional details, contact Mario Miranda Sazo, cell 315-719-1318, mrm67@cornell.edu

Meeting title	**USDA-ARS Apple, Grape, and Tart Cherry Germplasm Collection Tour**
Date	Saturday, September 15th
Time	9 AM – 11 AM
Location	McCarthy Farm, 2865 County Road 6 (Preemption Road), Geneva, NY, 14456 (across from St. Mary's Cemetery).
Cost	None
Brief description of meeting	A 2 hr. walking tour on uneven ground through the orchard and vineyard. We will walk and talk for10 minutes about the collection overall, 10 minutes about the tart cherry collection, 30 minutes about the grape collection and 70 minutes about the apple collection. This tour is held annually on the 3rd Saturday in September.
Registration/Contact for information	No reservation is needed. If there is any question, please contact Ben Gutierrez at ben.gutierrez@ars.usda.gov and 315-787-2439 or Thomas Chao at c.thomas.chao@ars.usda.gov and 315-787-2454. This event is rain or shine.

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Dan LaGasse

Lake Ontario FRUIT

Scott Henning

John Russell

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Cornell Cooperative Extension
Lake Ontario Fruit Program
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Fruit Notes

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

Fruit Specialists

Craig Kahlke I 585-735-5448 I cjk37@cornell.edu

Team Leader, Fruit Quality Management

Areas of Interest: Fruit Quality and factors that affect fruit quality before, during, and after storage,

Mario Miranda Sazo I 315-719-1318 I mrm67@cornell.edu

Cultural Practices

Crops: Blueberries, Raspberries / Blackberries, Strawberries, Apples, Apricots, Asian Pears, Cherries, Currants, Gooseberries, Nectarines, Peaches, Pears, Plums

Tessa Grasswitz I 585-261-0125 I tg359@cornell.edu

Integrated Pest Management (IPM)

Areas of Interest: IPM of tree fruit and berry pests, biological control, pollinators, and impact of climate change.
Crops: Blueberries, Raspberries / Blackberries, Strawberries, Apples, Apricots, Asian Pears, Cherries, Currants, Gooseberries, Nectarines, Peaches, Pears, Plum

Mark Wiltberger I 315-272-8530 I mw883@cornell.edu

Business Management

Crops: Apples, Cherries, Nectarines, Peaches, Pears, Plums

For more information about our program visit us at lof.cce.cornell.edu