Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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Tree Fruit News

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In this issue of Tree Fruit News:

Rainfall (inches)

Locations	Rain-fall (In.)	High (ºF)	Low (ºF)
Chazy	3.7	89.1	49.8
Peru	3.9	88.1	48.5
Crown Point	N/A	91.9	49.0
Clifton Park	1.0	96.9	49.9
Marlboro	1.4	92.7	52.9
Hudson	1.6	94.9	50.9
Highland HVRL	1.2	93.2	53.6

Degree Day Accumulations (through 8/3/15)

	Degree Day 43			Degree Day 50		
Location	2014	2015	Difference	2014	2015	Difference
Chazy	2087.0	2199.2	112.2	1381.0	1458.6	77.6
Peru	2159.0	2228.5	69.5	1439.5	1477.2	37.7
Crown Point	2156.9	2204.8	47.9	1428.8	1475.3	46.5
Clifton Park	2276.1	2528.2	46.5	1537.9	1753.0	215.1
Marlboro	2428.0	2555.8	127.8	1639.0	1768.6	129.6
Hudson	2503.0	2621.4	118.4	1719.1	1837.4	118.3
Highland HVRL	2505.9	2644.4	138.5	1701.8	1847.1	145.3

Serving the educational and research needs of the commercial small fruit, vegetable and tree fruit industries in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Putnam, Rensselaer, Saratoga, Schoharie, Schenectady, Ulster, Warren and Washington Counties

10 Takeaways from the July 15-17, 2015 IFTA Summer Tour

Reflections on the WA apple production and What It Means for the NY Industry

Dan Donahue, Anna Wallis, Gemma Reig Cordoba, Cornell Cooperative Extension ENYCHP

Dave Rosenberger, Cornell (Emertus)

Peter Jentsch, Cornell HVRL

This July, we had the opportunity to visit Washington State (WA) to tour apple orchards and research stations on the IFTA Summer Study Tour, July 15-17. The Washington Industry lived up to its goliath reputation. As the top producer of apples in the country, the value of Washington's production was estimated at $2.18 billion (2012 Census of Ag USDA). We were shown many orchards with enormous new plantings of high-density, multi-leader systems. Despite the size of this industry, the number of influential players is very small. We were told sixteen organizations control a substantial majority of industry acreage, with many of these owning multiple 'ranches' and/or packinghouse facilities.

Much of what we saw was specific to the region. However, some of it has the potential to be adapted to Eastern NY production, and having a global perspective on apple production will help guide decisions for our regional industry. At the least, it is nice to know what the competition is up to!

The Takeaways:

Regional Climate Adaptations

Apple Oasis in the Washington Desert. Photo by D Donahue

1. The climate in central WA is radically different than the Eastern NY: 300 days of sunshine and an average of 8" of rainfall per year means the major environmental concerns are too much direct sunlight, too much heat and a limited supply of water. Orchards were adapted to these conditions, just as Eastern orchards are adapted to abundant rainfall and higher pest pressures.

Shade Cloths Used in Commercial Orchards and for Experimentation. Photos by Anna Wallis

2. WA orchards receive more *direct radiation*, meaning sunlight travels in a straight line from the sun to the earth; while New York orchards receive more *diffuse radiation*, light is scattered by particles in the atmosphere. The abundant sunlight in WA is more than enough to saturate the carbohydrate model, even when light is reduced by 20% sunlight with shade netting.

   Leaders in the industry are moving rapidly to the use of overhead shade netting to reduce sunburn and wind damage, which combined can approach 25% loss during packout for some sites. Auvil Fruit has more than 1,000 acres under shade netting. Research efforts at the WSU Tree Fruit Research & Extension Center in Wenatchee are exploring colored shade netting to reduce heat stress and sunburn injury. Currently, the most common technology deployed for this purpose is an overheard sprinkler system, installed in combi-

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IFTA Summer Tour, continued from last page

nation with an under-tree drip system for irrigation and fertigation.

3. The industry is reliant on the Columbian Basin Project, which has provided irrigation water to central Washington since 1950s, by diverting water from behind the Grand Coulee Dam on the Columbia River. Water rights allow farmers access to measured amounts of water, purchased annually. Senior water rights granted as early as 1890 were interrupted this year, marking the worst drought in a century. Those with junior water rights were obviously in more trouble. During periods of shortage, junior water rights are completely subordinate to senior water rights, that is, "juniors" are cut off completely until the "seniors" reach 100% of their allotment. Earlier this year, there were examples of junior water rights holders cut off from access to any water for several weeks. Is there a solution? Currently they only diverting ~3% of the Columbia River for agriculture, and efforts to increase this amount are being actively explored. Increases are often opposed by power companies that wish to preserve water flow through power turbines and by conservationists concerned that low water flow during summer will reduce the abilities of salmon fingerlings to reach the ocean.

Industry Growth and Planting Systems

Tall V-Trellis Apple Orchard in Washington State – Note the scale relative to the group of growers standing in the row middle. Photo by D. Donahue

4. High profitability within the apple industry over the past 5-8 years has led to elevated levels of re-investment in the WA industry. At least on the surface, the $35,000+/acre investment raises questions about financial rationality.

5. Washington State has massive new plantings of super high density (2,000 trees/A) that are expected to yield 2000 to 2500 bu/A (100 bins/A with 22 bu bins = 2,200 bins/A, and many growers spoke of 100 bin/A targets for new plantings).

6. Precision management is an essential component of the production systems in WA. Growers have found that it is critical to manage young trees effectively to realize the full potential of a planting. Each season, increasing numbers of growers begin with dormant bud counts to estimate crop potential, followed by chemical thinning applications, and finally an *enormous* amount of hand thinning. New York growers rely more on aggressive chemical thinning, in an attempt to minimize costly hand thinning. In the Northeast, researchers and growers have been testing a system of periodic fruit measurements, input into a spreadsheet based *Fruit Growth Model,* in an attempt to scale and time multiple applications of chemical thinners. In Washington, this part of what we consider *Precision Thinning* is left out. Trees are precision pruned to a target floral bud count, chemical thinner is applied during bloom or post-petal fall, a fruits/tree target is set, and once the chemical thinner(s) has done what it can, fruits/tree are counted, and then the orchard is hand thinned down to the target. Impeccably managed high density systems—each lateral limb positioned and tied down to trellis, allowing uniform light exposure, and extremely well-balanced trees—were the norm. Also, to avoid confusion, keep in mind that the term "Slender Spindle", as used by Washington State producers, is equivalent to our "Tall Spindle" training system.

   Some exceptions included Fuji trees that had been over-fertilized and pushed hard to fill canopy space, resulting in a lot of blank wood. Also, in the original v-trellis WA Honeycrisp blocks, trees were cropped too early and not filling canopy space. Growers are replanting on more vigorous rootstock, re-grafting old plantings and pushing hard with high nitrogen fertilizer regimens in the first few years.

   For Honeycrisp, the early strategy appears to have evolved to one of using high nitrogen levels to push the trees to full canopy volume *without early cropping*. Once the canopy is complete (by year 3?), cut way back on the nitrogen, and allow cropping. The hope is the trees will essentially stop growing once cropping has begun.

7. Transition to Organic production was a priority on eve-

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ry farm we visited. They perceive continued growth in market demand. Farmers in the dry climate clearly have the advantage of drastically reduced insect and disease pressure. But they were also adopting practices that may have a place in the east including weed control by cultivation and use of kaolin clay for both insect control and sunburn protection. Ironically, the preferred method to move into organic production appeared to be establishment of a conventional system, then transitioning to organic after the first 3 years. Using this approach means fruit from those orchards cannot be sold as organic until orchards were six years old.

Orchard Precision Management (Top). Note the lateral limbs neatly tied down to the wires, this mature Honeycrisp planting (Bottom) that has failed to reach the top wire.
Photos by A. Wallis

8. Due to export problems, including the port slow-downs on the west coast, WA packinghouses are dumping a lot of apples right now in addition to old blocks of Red and Golden Delicious that were never harvested last fall. There have been net $0 returns on Red Delicious this year.

Mechanization and Labor Requirements

9. Many WA growers are moving to H2A labor, and we saw many new modular housing units on farms that were specifically installed to handle H2A. Increased use of H2A by WA State will increasingly stress the capabilities of the national H2A program.

10. While adopting platforms as labor saving devices, WA industry is moving in the opposite direction in other aspects of labor management. We heard of trellis posts all being dug in by hand (holes 3-ft deep), trees at densities of 2,000/A being planted by hand digging the holes, and Honeycrisp growers who omit chemical thinners and then use only hand thinning in an effort to slow down early-season apple sizing so as to avoid large sizes at harvest. However, we heard many comments about labor shortages, and concerns about the future availability of labor, especially competition for labor with the growing Washington State wine grape industry.

Implications for NY State

Several Orchard Platforms Parked in a Row. Photo by A. Wallis

Given the current plantings in the ground *nationwide*, massive over-production of apples within the US appears to be a real risk. Continued expansion of export markets for U.S. apples will help divert this excess of apple away from the east coast domestic market. On a national level, New York growers should support efforts by U.S. Apple and others to reduce trade barriers and increase promotion in our export markets. Our New York growers should be thinking about ways to differentiate eastern apples from western apples.

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Options might include:

- Unique cultivars, such as Snapdragon and Ruby Frost. However, Washington State will also be introducing new cultivars, such as Cosmic Crisp, that (at least they say) are very good.
- Focus on "harvesting for flavor" by allowing better flavor development before applying 1-MCP. This approach, while difficult as it relates to labor management, will be much more feasible for eastern growers than for the massive acreage managed by Washington State growers. This area urgently needs more research on how to define the fine line between good flavor and poor storage quality, along with new tools for assessing varietal flavor at harvest.

As a follow-up we plan to present more information, including photos and videos, at the 2016 Winte Fruit Schools. We hope to generate discussion about the future of our industry—bring your ideas!

Bifenthrin Approved Against BMSB in the Hudson Valley for 2015

Peter Jentsch, Cornell HVRL

New York's Section 18 application for the use of products containing bifenthrin has been approved by the EPA. This is a renewal by the EPA and NYS DEC of a 'Section 18 Emergency/Crisis Exemption Approval' use permit for the pyrethroid bifenthrin to control brown marmorated stink bug on apples, peaches, and nectarines this year. The regional application request was submitted to EPA from the mid-Atlantic states of DE, MD, NC, NJ, PA,VA, WV and NY state.

Bifenthrin is one of the most effective insecticides for use against the brown marmorated stink bug (BMSB). Its use is limited to Columbia, Dutchess, Orange and Ulster Counties of NY. Upon determining the presence and trap threshold for BMSB in counties where the pest has caused injury to fruit in the past, applications of bifenthrin should be considered as the first step in managing the insect, taking into account the 30-day interval between applications. Consider a first application to be made along the orchard edge, bordering deciduous woodland and hedgerow or clusters of host trees such as catalpa, black locust, Tree of Heaven, maple, or ash. The need for a second application can be triggered as the insect is observed on fruit and/or captured in pheromone traps using 10 BMSB adult per trap per week as indicated by the EDDMaps.org site or trap presence on site.

Bifenthrin is a pyrethroid sold under the trade names of Brigade WSB (10% bifenthrin, EPA Reg. No. 279-3108, FMC Corp.), Bifenture EC (25% bifenthrin, EPA Reg. No. 70506-227), and Bifenture 10DF (10% bifenthrin, EPA Reg. No. 70506-227, United Phosphorus Inc.). Regardless of the product used, a maximum of 0.08 to 0.2 lb[AI]/acre/season will be allowed, with no more than 0.5 lb a.i./acre applied per year with multiple applications made at a minimum of 30 day intervals; a restricted entry interval (REI) of 12 hours and pre-harvest interval (PHI) of 14 days must be observed. When applying either of these materials for BMSB control on apples, peaches, or nectarines, growers must have possession of the Section 18 label. Presently the 2014 label is available at: (http://pmep.cce.cornell.edu/regulation/sec18/2014/index.html). The 2015 labels will be posted as soon as they are made available.

LAST CALL - 2015 NYS Apple Crop Survey

Matt Wells, Cornell Cooperative Extension LOFT

The 2015 crop survey will close on Saturday August 8th. If you are a NYS apple grower please take the time to complete this important survey. As a NYS grower you should have received a mailing last week with the link and password to the survey site. The link can be found on the Lake Ontario Fruit Team website at (http://lof.cce.cornell.edu/) or clicking the following survey link to begin immediately: https://cornell.qualtrics.com/SE/?SID=SV_3DXkHEFrxIhpoY5. If you have any questions you can email Matt Wells, the site administrator at maw377@cornell.edu

Anna has a new phone number – (518) 410-6283

Due to Cornell policy changes, Anna has a new mobile phone number. The number is: (518) 410-6283. Please update your records and replace the old number in your mobile devices. I'm aware it will take some time to transition, so I will be available on my old number for the time being. Thank you! And sorry for any inconvenience.

Recommendations for Fruit Drop Control in ENY in 2015

Poliana Francescatto, Dan Donahue and AnnaWallis, Cornell Cooperative Extension ENYCHP

ReTain Label Change for 2015

A 2015 supplemental label for New York State allows the use of up to two (2) pouches of ReTain per acre on apples in a single application, for a single pick. A copy of the supplemental label must be in the possession of the applicator at the time of application. Click here for a link to the NYS supplemental label on the Cornell PIMS website. We currently do not have any research-based recommendations on applying the two pouch/acre rate.

Review

In 2015 there are 3 materials, which are registered for control of pre-harvest drop in apples: NAA, ReTain and Harvista.

NAA provides modest drop control because it inhibits abscission, however fruit softening and reduced storage life are likely if warm weather follows application or if harvest is delayed until ripening has been substantially advanced.

- ReTain is a plant growth regulator which inhibits ethylene production in the fruit and reduces pre-harvest drop. It also reduces fruit cracking and fruit greasiness but it delays the development of fruit red color about 1 week. Applied at different times and rates ReTain provides different levels of control of pre-harvest drop and fruit maturity. Its performance is improved when combined with NAA since the two products work synergistically to reduce fruit drop while the ReTain suppresses the production of ethylene by NAA.
- Harvista is a new class of drop control chemical, which inhibits the action of ethylene in the fruit and reduces fruit drop. Each chemical has a different mode of action and thus different timing of application for optimal performance.

Research published in a 2014 NYFQ article written by Philip Schwallier and Amy Irish-Brown of Michigan State University Cooperative Extension provides additional recommendations on rates, timing, and combinations of materials by variety.

Table 1. Effects of pre-harvest materials on fruit maturity and drop

Material	MoA	Pros	Cons
NAA	-Delays formation of abscission zone	- Modest drop control	Stimulates ethylene production and fruit ripening
ReTain (PGR)	- Reduces ethylene production	- Reduces pre-harvest drop - Reduces fruit cracking - Reduces fruit greasiness - Lengthens shelf life - Reduces watercore - Improves fruit size	Delays the development of fruit red color about 1 week
Harvista (MCP)	- Inhibits action of ethylene	- Reduces fruit drop	Custom application necessary

McIntosh Recommendations for Eastern New York

- NAA: NAA requires 1-2 days to come into effect, and will provide a degree of drop control for a period of 7-10 days, although drop control is not always reliable. In the case where you may need 3-4 days of drop control and long term storage is not planned, NAA can be useful. However, since NAA stimulates ripening and can provide unreliable drop control when applied alone, in general we do not recommend the use of NAA alone.
- ReTain Timing: ReTain should be applied 2-4 weeks before anticipated normal harvest. In general, we suggest applying ReTain at 3 weeks before harvest in cool years and at 4 weeks before harvest in hot years. We consider this year to be more "normal", so our recommendation is based on 25 days.
- ReTain Application Rates: One pouch of Retain per acre will give the best drop control but will delay color development by 7-10 days. A ½ pouch of Retain will also work and has a less negative effect on fruit color but the control of fruit drop will wear off sooner (often before the end of September).
- Hudson Valley: Our suggested application timing for (non-Marshall) McIntosh in 2015 is August 8 (based on the expected

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Recommendations for Fruit Drop Control, continued from last page

Table 2. Effects of ReTain Rates and Timings on Fruit Development	
Rate, Timing	Effect
Full Rate, 30 DBH (333 g/acre, i.e. 1 pouch)	Delays harvest 7-10d
Half Rate, 30 DBH	Delays harvest 4-7d
Full Rate, 14-21 DBH	Less impact on red color development, greater risk of pre-harvest drop. No later than 14 DBH for varieties highly prone to drop.
Split Treatment: ½ rate 30 DBH, ½ rate 14 DBH	Best practice for managing drop and achieving quality fruit

Mac harvest beginning on September 2 with an estimated CA cutoff date of September 12). For earlier strains like Marshall, adjust the dates according to your experience.

◊ Champlain Valley: Our suggested timing in the in 2015 for Rodgers Mac is Aug 18 (based on the expected Mac harvest beginning on Sept. 12 with an estimated CA cutoff date of September 22). For earlier strains like Marshall, adjust the dates according to your experience.

◊ Retain + NAA: Our research in the last few years has shown the best combination of drop control with the least negative effect on fruit color is achieved by splitting a full rate of Retain into 2 sprays of ½ rate of ReTain each time and including 10ppm NAA in both sprays. In 2015 we recommend the application of the first 1/2 pouch of ReTain per acre + 10 ppm NAA (4oz/100 gal) at 3 weeks before normal harvest (Application on August 12 in the Hudson Valley and on August 22 in the Champlain Valley) and 1/2 pouch of ReTain per acre + 10 ppm NAA one week before normal harvest (Application on August 26 in the Hudson Valley and on September 5 in the Champlain Valley).

◊ Surfactants: It is critical to include an organosilicone surfactant with ReTain especially when combined with NAA. The organosilicone surfactant, such as Silwet (12 oz/100 gallons), improves the uptake of ReTain better than other surfactants thus ensuring that sufficient ReTain is absorbed by the leaf to suppress the stimulatory effect of NAA on ethylene production.

Gala Recommendations for Eastern New York

◊ Effects of ReTain on Gala:
  - ◊ Fruit will remain on the tree an additional 7-14 days.
  - ◊ Improved fruit size as fruit will increase in size approximately 1% per day
  - ◊ Reduced stem end cracking and greasiness in 2nd & 3rd picks.
  - ◊ Maturity is delayed, and becomes more even on the tree. As a result, is sometimes possible to reduce the number of picks necessary down to one or two.

◊ ReTain Rates: We recommend the application of a ½ pouch of Retain per acre. The 1– 2 pouch rates of Retain are never recommended since Retain at higher rates has a very strong negative effect on Gala color development.

◊ ReTain Timing: Apply 2-3 weeks before expected first harvest. Our recommendation this year is based on 18 days.

◊ Hudson Valley: Our suggested application timing for Gala in 2015 is August 11, based on the expected Gala harvest beginning on August 29.

◊ Champlain Valley: Few Galas are grown in the Champlain Valley, but if needed apply Retain around August 22, with volume harvest starting around September 9.

◊ Surfactants: It is critical to include an organosilicone surfactant with ReTain. The organosilicone surfactant, such as Silwet (12 oz/100 gallons), improves the uptake of ReTain better than other surfactants.

Honeycrisp Recommendations for Eastern New York

◊ Honeycrisp is a low ethylene producing variety that has very uneven ripening but can have significant pre-harvest drop in some years. We recommend the use of ReTain in blocks that have had a pre-harvest drop problem in the past.

◊ ReTain Timing: Apply three weeks before expected har-

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Recommendations for Fruit Drop Control, continued from last page

vest.

- ReTain Rates: We recommend a 1/3 of a pouch/acre rate of Retain on Honeycrisp.
- Hudson Valley: In 2015 our suggested application date is August 12, with 1st pick in volume expected around September 2.
- Champlain Valley: In 2015 our suggested application date is August 22, with 1st pick in volume expected around September 12.
- Surfactants: It is critical to include an organosilicone surfactant with ReTain. The organosilicone surfactant, such as Silwet (12 oz/100 gallons), improves the uptake of ReTain better than other surfactants.

Recommendations for Later Season Varieties in Eastern New York

- ReTain Effects on Later Varieties:
  - Reduced greasiness in Cortland and Jonagold
  - Opportunity for better harvest management of Empire, Delicious, and Jonagold since they often have to be picked all at the same time.
  - Idared and Rome both suffer from internal flesh pigmentation (bleeding). Our recent research indicates this problem can be controlled effectively with ½ pouch/acre of ReTain applied in mid-September.
- ReTain Timing: Three weeks before normal harvest. Use your experience with this year's early varieties along with your annual harvest records to determine the correct application date for Empire, Delicious, Jonagold, Cortland, Idared, and Rome.
- ReTain Rates: Apply one pouch/acre. The negative effect of Retain on fruit color development is much less than in early September varieties, so the use of full rates is not a concern in this case.
- Surfactants: It is critical to include an organosilicone surfactant with ReTain. The organosilicone surfactant, such as Silwet (12 oz/100 gallons), improves the uptake of Retain better than other surfactants.

Final Note about the Timing of ReTain Applications

Remember that the earlier Retain is applied the greater the negative effect it has on fruit color but waiting too long will result in some ethylene production and some fruit drop before Retain suppresses ethylene production.

Harvista Observations and Recommendations

Harvista Effects on Apples:

- Pre-Harvest Fruit Drop Control.
- Safe delay of harvest for additional color and fruit size development.
- Maintenance of fruit firmness before and/or after harvest (storage benefits are short term).
- Slowed starch conversion.
- Delayed and reduced incidence of watercore.
- Greater consistency in maturity for improved storage performance.
- Fewer pick dates required for multiple-pick varieties
- Recent research has demonstrated a reduction in Soft Scald in Honeycrisp.

Harvista Timing: About 1 week before anticipated harvest but before significant drop occurs.

Harvista Rates: Harvista is difficult to apply and must be applied by the manufacturer (Agro Fresh) to ensure an effective application process. Interested growers should contact Keith Culver at Agro Fresh (phone: 585 738-2189).

Harvista Formulation Change: Oil has been removed from this year's Harvista formulation. While the material is now applied in a water base, grower application is not possible at this time. Agro Fresh believes that the removal of the oil eliminates concern over phytotoxicity risk when Harvista is applied close to a previous Captan application.

Harvista and ReTain? During hot years where some early fruit drop can occur in McIntosh before we have reached the proper Harvista timing. If this situation is anticipated, an earlier application of ReTain can help alleviate the early drop problem. We do not anticipate this strategy being needed in 2015.

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Meetings & Announcements

Limiting Bird Damage in Fruit: State-of-the-Art Pest Management Tactics

Wednesday, August 19th

Cornell Cooperative Extension Saratoga County, 50 W. High Street, Ballston Spa, NY 12020.

This workshop will offer comprehensive discussion of successful bird management strategies in susceptible fruit crops, including:

- ◊ Sweet and Tart Cherries
- ◊ Blueberries
- ◊ Honeycrisp apples
- ◊ Wine Grapes

Morning session topics include: (Morning session available via WebEx webinar)

- ◊ Which bird species damage fruit
- ◊ Economic losses to fruit from birds
- ◊ Consumer preference for management tactics
- ◊ NY grower survey
- ◊ Tactics for deer management
- ◊ Regulations & permitting for wildlife control
- ◊ Landscape factors that place fruit at risk
- ◊ Bird mitigation strategies

Afternoon on-farm field demonstrations include:

- ◊ Falconry as a scare tactic
- ◊ Air dancers as a scare tactic
- ◊ Discussion of tactics being used on representative farms.

Registration fee, $10; advance registration is required by August 12. Contact: Marcie Vohnoutka, ENY Commercial Horticulture Program,
518-272- 4210 mmp74@cornell.edu.
DEC credits are being requested.

2015 Hudson Valley Regional Storage Workshop

Monday, August 24, 1:30 – 4:00 pm, Hudson Valley Research Lab

Areas covered will be:

- ◊ Gala stem end browning
- ◊ Storage of Honeycrisp
- ◊ DCA
- ◊ Overview of storage issues for varieties of importance
- ◊ Questions & Answers

There will be no charge to attend. Pre-registration is not required, but for planning purposes it would be helpful to email Dan at djd13@cornell.edu with the name of your orchard/storage business, phone number, and names of the people planning to attend. The Hudson Valley meeting will be held in the Hudson Valley Research Lab conference room, 3357 Rt. 9W, Highland, NY 12528. If you have any questions, please call Dan Donahue at (518) 322-781

2015 Champlain Valley Regional Storage Workshop

Thursday, August 20, 10am – 12pm, Clinton County CCE Office

Areas covered will be:

- ◊ Storage of Honeycrisp
- ◊ DCA storage of McIntosh and other varieties
- ◊ Storage of NY1 and NY2
- ◊ Research Priorities
- ◊ Questions & Answers

There will be no charge to attend. Pre-registration is not required, but for planning purposes it would be helpful to email Anna at aew232@cornell.edu with the name of your orchard/storage business, phone number, and names of the people planning to attend. The Champlain Valley meeting will be held at the Clinton County CCE office, 6064 Rte 22, Plattsburgh, NY 12901. If you have any questions, please contact Anna Wallis at (443) 421-7970 or aew232@cornell.edu.
***Lunch will be provided at the Champlain Valley Workshop for those who pre-register
2.

Cornell Fruit Pest Control Field Days in Eastern & Western New York

The N.Y. Fruit Pest Control Field Days will take place during Labor Day week on Sept. 9 and 10 this year, with the Geneva portion taking place first (Wednesday Sept. 9), and the Hudson Valley installment on the second day (Thursday Sept. 10). Activities will commence in Geneva on the 9th, with registration, coffee, etc., in the lobby of Barton Lab at 8:30 am. The tour will proceed to the orchards to view plots and preliminary data from field trials involving new fungicides, bactericides, miticides, and insecticides on tree fruits and grapes. It is anticipated that the tour of field plots will be completed by noon. On the 10th, participants will register at the Hudson Valley Laboratory starting at 8:30, after which they will view and discuss results from field trials on apples and other fruit crops. No pre-registration is required for either event.

Current ENY Tree Fruit Team Activities 2015

Dan Donahue and AnnaWallis, Cornell Cooperative Extension ENYCHP

In addition to *classic extension responsibilities*, the ENYCHP has increased our commitment to *applied research*. This is in part due to the change in structure of Cornell Cooperative Extension and the positions being filled (or not) at the NYAES, HVRL, and Cornell University, as many of the established scientists reach retirement age. Including applied research in under extension has the benefit of more trials in various regions of the state, under the direction of extension personnel in that region. Below is a list of the projects in which the ENY Tree Fruit team is currently active. We are also collaborating on other projects including the Orchard Systems Trials, Rootstock Trial, Irrigation Trial, and Storage Projects led by Chris Watkins and Terence Robinson.

Research Projects	
Apple Harvest Maturity Program	Providing harvest recommendations for CA and cold storage through weekly sampling and report.
Precision Chemical Thinning	Protocol created to more precisely apply chemical thinners for crop load management. Rate and timing of the chemical thinning applications are considered. June drop is also being monitoring.
Planting Systems Trials	One planting in each region (CV and HV) evaluating orchard spacing, rootstocks, training and pruning.
Rootstock Trials	One planting in each region (CV and HV) evaluating the rootstocks.
Crop Load Estimate	Statewide effort to create a more accurate estimate of the annual crop.
BMSB Trapping	Brown Marmorated Stink Bug trapping. Part of a statewide collaboration to monitor the distribution and biology of this invasive insect.
BSB Distribution and Biology	Black Stem Borer project part of a statewide collaboration to monitor the distribution and biology of this invasive insect as well as its effect on orchards.
Northern New York Apple IPM	Monitoring economically significant insect pests in NENY. Revisiting classic IPM approach to controlling insect populations.
Perennial Weed Control in Apples	Testing fall applied herbicides for control of perennial weeds. The goal is to see if fall herbicides will be sufficient to reduce spring spraying when scab control is a priority.
Hard Cider Working Group	In an effort to be on the front end of this new and growing industry, we have created a working group of extension specialists and collaborators to guide research and outreach efforts in the future.
Education	
Tree Fruit E-Alerts	Twice weekly, emails sent on 'hot topic' issues. Date and time stamped for record-keeping.
Tree Fruit Newsletter	Monthly newsletter with weather, phenology, and pest updates. Includes articles written by extension specialists, Cornell Scientists and sourced from out of state where relevant.

Summer 2015 Tree Fruit E-Advising Survey: Please take a few minutes to complete the Summer 2015 Tree Fruit E-Advising Survey. This is the second E-Advising survey for the ENYCH Program. We appreciate you taking the time to complete this survey. Your input is essential for helping us understand the industry and prioritize our research and outreach activities.

Link to survey: https://cornell.qualtrics.com/SE/?SID=SV_24TIhknNnqbq71r

As always, we welcome feedback on any topic throughout the year. And are available by phone or email to discuss with you any aspects of your orchard or the ENYCH program. This survey is completely anonymous and provides you with the opportunity to privately and anonymously express your needs and opinions. Thank you!

- Anna and Dan, Cornell Cooperative Extension ENYCHP

Strength of the Dollar and Exports — Where are we Headed?

Maire Ullrich, Cornell Cooperative Extension ENYCHP

The U.S. exchange rate has appreciated in recent months, and global economic and political conditions suggest a continuation of this trend. In the February 2015 Outlook for U.S. Agricultural Trade, the USDA lowered its agricultural trade surplus forecast for 2015 to $22.5 billion, the lowest since 2007, in part because of the rising dollar. While exchange rates are critical to U.S. competitiveness abroad, they are less important for some U.S. agricultural products that are differentiated from competitors by their quality, their innate characteristics, or the efficiency with which they are supplied to foreign consumers. For more see the whole article at: http://www.ers.usda.gov/amber-waves/2015-june/what-does-exchange-rate-appreciation-mean-for-export-competitiveness.aspx#.Vb-x_flViko