Recommendations for use of Retain in Western NY for Fruit Drop Control in 2013
Terence L. Robinson, Mario Miranda Sazo, and Craig Kahlke

Retain is an excellent plant growth regulator for reducing preharvest drop, fruit cracking and fruit greasiness. It usually provides excellent drop control except in hot years. 2013 appears to be a more normal year without intense heat in August, thus normal use of Retain is recommended.

Our suggested timing for McIntosh in WNY during a normal year is 3 weeks before expected harvest, which we estimate is between Aug. 22 and 27. In Western NY the choice between a full or ½ rate of Retain on Macs depends on the goals of the grower. A full rate of Retain (1 pouch per acre) will give the best drop control but will delay color development by 7-10 days. The ½ rate of Retain will also work and has a less negative effect on fruit color but the drop control will wear off sooner. Drop control of the ½ rate of Retain can be improved by the inclusion of 10ppm NAA in the Retain spray. If growers do not need more than 7-10 days of drop control and cannot wait for color to develop in Macs treated with Retain (because they must pick later varieties) then the ½ rate of Retain + 10ppm NAA is suggested. An alternative strategy for maximum drop control (which we strongly recommend) is to apply a split application of Retain plus NAA at 4 and 2 weeks before harvest. This means applying 1/2 the normal rate of Retain + 10ppm NAA at August 19-23 in WNY (4 wks. before normal harvest) and 1/2 the normal rate of Retain + 10ppm NAA Sept. 1-6 in WNY (2 wks. before normal harvest).

With Gala we recommend the application of a ½ rate of Retain applied 3 weeks before expected harvest (Aug. 20-27). The full rate of Retain is never recommended since Retain at the full rate has a very strong negative effect on Gala color development. The 1/2 rate of Retain will permit Gala fruit to remain on the tree an additional 7-14 days resulting in improved fruit size, good color development and less stem end cracking. Retain delays maturity but results in a more even maturity on the tree. Multiple picks on Gala can be reduced to 2 or even 1 picking in some cases. By delaying harvest date, fruit size increases by 1% each day harvest is delayed. Retain also reduces fruit stem end cracking and greasiness that are problems as Gala fruits mature in the second and third picks.

Honeycrisp is a low ethylene producing variety that has very uneven ripening but can have significant pre-harvest drop in some hot years. We recommend a 1/3 rate of Retain applied 3 weeks before expected harvest in blocks which have had a drop problem in the past.

For late September and October varieties the negative effect of Retain on fruit color development is much less than in early September varieties, thus we suggest the use of the full rate of Retain to provide a consistent reduction of drop and greasiness. For late September and October varieties which are harvested under cooler conditions, application timing should be 3 weeks before normal harvest date.
Treating Empire, Delicious and Jonagold provides some flexibility in harvest date since those three varieties need to be harvested at about the same time.

Retain also allows some flexibility in harvest date to spread out the harvest of these 3 varieties.

Cortland and Jonagold both suffer from greasiness problems as the fruit mature and Retain applied 3 weeks before normal harvest can be a very effective control strategy. Idared and Rome both suffer from internal flesh pigmentation (bleeding), which can result in rejection of the fruit at the processing plant. Our recent research indicates this problem can be controlled effectively with ½ rate of Retain applied in late September.

Two final reminders: (1) the earlier Retain is applied the greater the negative effect it has on fruit color, but waiting too long results in some ethylene production and some fruit drop (before ethylene production is suppressed), and (2) use an organosilicone surfactant such as Silwet (12 oz./100 gallon) with Retain.

Preparing for Harvest/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)

- 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 ½ pint ($4.00) and 1 pint ($8.00) sizes. If you want large quantities, please call or email Craig (585-735-5448, cjk37@cornell.edu) to order by the gallon ($40.00). Prices for iodine solution have gone up this year because the chemicals that make up the solution have gone up significantly. Starch charts are also available free of charge at the same locations.

If you would like to subscribe to receive the Harvest FAX (Harvest Maturity Reports), which are weekly reports during harvest starting with Ginger Gold and reporting ripening indexes for over 20 apple varieties, please subscribe or renew soon -see form in this issue or call Kim Hazel at 585-798-4265 ext. 26.

Overall Maturity Issues:
- So far, so good! A normal timing of bud break and an adequate bloom period followed by reliable weather for most part (except a freeze event on May 14 which damaged some fruit for quite a few growers) started off the season way better than 2012. Periods of heavy rain in the late spring gave way to really hot weather in mid to late July. Ever since, very mild temperatures with plenty of sunshine and cooler nights have been the dominant weather patterns into August. Reports are of excellent fruit size and a very good cropload for most of Western NY. As of now, we seem to be right on target for a “normal” harvest maturity window, at least for the early varieties.

- Weather forecast – The bands of showers/thunderstorms are clearing out of our region by early afternoon today, and the muggy weather should be leaving us for a while. Saturday through Tuesday should bring us high
ranging from the mid to upper 70s, with lows in the 50s and 60s. This looks to be excellent weather for coloring fruit. Sunshine should be the rule with chances of showers not returning until Tuesday.

- Please follow recommended maturity indices for each variety in addition to consulting with your marketer. Make sure there is adequate varietal flavor prior to harvest. While I realize inventories are very low and the large demand for fresh apples have marketers screaming for fruit, picking under-mature fruit will only kill repeat sales.

- Variation between individual blocks and orchards always occur. Because of this inherent variation, the average maturity index readings of several grower blocks (as developed by the regional testing program) has often provided a better guide to harvest than readings from individual orchards. BE SURE TO CONSULT WITH YOUR MARKETER – before harvesting the block.

- Crop load effects maturity. Trees with lighter crop loads, along with stressed trees and very young trees usually mature earlier. Maturity is usually delayed in trees carrying a larger crop.

Jersey Macs – Picking nearly finished.

Paula Reds- Ethrel treated fruit are being picked now. Non-Ethrel fruit will begin to be picked in the next few days. Great color on this variety this season.

Ginger Gold – Reports across most of the region are of excellent cropload and very large fruit size. However, color break has not yet started. In addition, there is little starch movement or varietal flavor yet. Pressures are averaging about 19.5 pounds. It looks as if we are on target for the bulk of the Ginger Gold to be ready for harvest the last week of August.

**Pest Update**

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**Spotted wing Drosophila:** Liz Tee of CCE-LOF has been running traps in 3 sites, one in Monroe, Orleans, and Niagara, and late last week noted a male SWD that was reared from black raspberry sample picked on 7/22. Juliet Carroll and Art Agnello are trapping in Wayne County. SWD has been detected in traps in all corners of the state. Fruit infestation particularly in raspberries and blueberries is reported in Long Island and the Hudson Valley. Trap counts are generally low, but fruit infestation always occurs before we see the flies in the traps. With the low trap counts reported across the Lake Ontario region, it is time to protect the berries still to be harvested on the farm on a weekly (or 5 day schedule). Sanitation and clean picking will be critical to these crops. Review the list of insecticides labeled with 2ee for control of SWD. Day-neutral strawberries being harvested – options included malathion if you can wait 3 days before harvesting again; Danitol (2 days PHI); Assail, Radiant, or Entrust (1 day PHI), or Brigade (0 day PHI). We expect fruit infestation potential in late harvested blueberries, blackberries, and fall raspberries. In blueberries, Brigade or Mustang Max have a 1 day PHI; Entrust, Delegate, Danitol, Triple Crown, and Imidan have a 3 day PHI. In raspberries, Delegate, Entrust, Mustang Max, and malathion have a 1 day PHI, and Brigade, Danitol, and Triple Crown have a 3 day PHI. For your reference, a quick guide to the insecticides labeled and available for use against SWD in the following crops have been posted on the Cornell Fruit website:

**Berry Crops:**
http://www.fruit.cornell.edu/spottedwing/pdfs/UpdatedLabeledInsecticidesNY-SWD-Final.pdf.

**Stone Fruits and Grapes:**

**Codling moth** trap counts are down for the past week but still well above threshold in my “high pressure” orchards on our trap network; but counts are lower in the low pressure sites indicating we are getting close to the end of the 2nd generation flight. But we are only about halfway through the
egg hatch period so it is critical in high-moderate pressure sites to follow up 2 weeks after the last spray (which was the first spray for the second generation egg hatch between July 25-28).

**Oriental fruit moth** trap counts are also increasing in some sites with mixed population of CM and OFM, and where peaches are grown but not sprayed. The OFM will move over into apples from the peaches. Recommended options for CM and OFM in apples include Altacor (5 day PHI), Assail (7 day PHI), Belt (14 day PHI), Calypso (30 day PHI), Delegate (7 day PHI), or Voliam Xpress (21 days PHI). In peaches for OFM, you can use Altacor (10 day PHI), Assail (7 day PHI), Delegate (1 day PHI), Belt (7 day PHI) or Voliam Xpress (14 day PHI). Pyrethroids and OP’s are effective for OFM control especially in peaches but watch the PHI. Pyrethroids and OP’s (unless used at highest label rate) but may be less suitable for codling moth in apples because of locally resistant populations. **Good spray coverage is essential this time of year for codling moth and oriental fruit moth and diseases.**

**Apple maggot** trap counts are still active so include Imidan where Delegate or Altacor are being used for CM/OFM. Or use the higher labeled rate of Assail/Calypso, or pyrethroids to control AM. Do not stretch intervals past 10 days or an inch of rain for maggot control where you have a history of pressure. Altacor and Delegate only mention “suppression” at higher label rates so not the best choice for apple maggot control under high pressure. Research by Harvey Reissig shows that the new materials result in more stings (but no tunnels) from apple maggot since the newer insecticides do not kill adults like the old OP’s did. We also experienced much higher trap counts last season perhaps because we are not killing the adults when using neonics, Delegate, Altacor or Belt.

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**New Strategies for Farm Succession Planning**

NY FarmNet

This isn’t your grandpa’s farm transfer. Farm succession now requires legal, tax, and business strategy. Industry professionals and farmers will offers tips for transferring farm ownership to the next generation at a conference, “New Strategies for Farm Succession Planning,” slated for Sept. 24-25 at the New York State Fairgrounds in Syracuse.

“Over the years, the farm transfer process has become increasingly complex. At the same time, farmland values continue to appreciate. These factors make it necessary for farmers to have in place innovative strategies to ensure a successful transition in ownership and keep the farm in agriculture,” said Ed Staehr, executive director of NY FarmNet and a senior extension associate with the Dyson School at Cornell University.

NY FarmNet organized the conference in light of the growing number of requests from farmers faced with how to successfully keep the farm business going under new management of the next generation of operators – from within, and outside, the farm family.

NY FarmNet provides free and confidential technical assistance in farm financial matters, including farm startup, business planning, developing financial statements, debt restructuring, and more. NY FarmNet’s personal wellbeing staff helps farmers improve family and business communication skills and address stress, communication, and other concerns.

NY FarmNet is an extension and outreach program of the Charles H. Dyson School of Applied Economics and Management at Cornell University.

The conference provides farm families and their advisors information on developing effective farm business succession plans. Presenters include nationally renowned experts in farm succession planning. Robert Milligan, Senior Consultant with Dairy Strategies/Professor Emeritus Cornell University, and Sharon Danes, Professor and Family
Economist at the University of Minnesota, will lead discussions on management and relationship-building relevant to farm succession planning.

Professionals from Farm Credit, Farm Family Insurance, and a leading law firm in succession planning will describe how to develop a plan that works for your farm business, including funding, tax, legal, and insurance strategies. A multigenerational panel of farmers will share how they implemented succession plans for their farm business.

A significant number of farms now exceed Federal gift and estate tax exemptions. As a result, some farm owners are reluctant to develop a strategy for the next generation to continue farming. In many cases, profitability is not a limiting factor in farm business transferability. Family communication issues between generations are a frequent impediment to successful farm business transfers.

For more information, contact 1-800-547-3276 or email aes6@cornell.edu. Look for NY Farm Net online at www.nyfarmnet.org, or www.facebook.com/nyfarmnet/.

Meeting Announcement: New Strategies for Succession Planning

Where: Broadway Bistro Room, NYS Fairgrounds, Syracuse, NY
When: September 24-25, 2013
Pre-registration required by Sept. 12! Cost: $100 (inc. meals & materials)

September 24th Agenda
11:00- Noon Registration
12:00 – 12:45 PM Lunch
12:45 PM – 1:00 PM Welcome
1:00 – 2:00 PM State of Farm Business Ownership/Need for More Transfers - David Haight, American Farmland Trust
2:00 PM- 3:00 PM The Three C’s of Farm Family Business Succession: Commitment, Collaboration, and Conflict Management. - Robert Milligan, Senior Consultant Dairy Strategies/Professor Emeritus, Cornell University and Sharon Danes, Professor and Family Economist, Univ. of Minnesota
3:00 PM – 3:30 PM Break
3:30 PM – 5:30 PM The three C’s continued - Sharon Danes and Robert Milligan
6:00 PM Dinner
7:00 PM – 8:00 PM Multigenerational Farmer Panel - Moderated by Robert Milligan and Sharon Danes

September 25 Agenda
7:00 AM – 8:00 AM Breakfast
8:00 AM – 9:00 AM Funding Your Farm Business Transfer, Farm Credit
9:00 AM – 9:40 AM Legal Strategies for Farm Business Transfer - Jeff Fetter, Scolaro, Schulman, Cohen, Fetter & Burstein
9:40 AM – 1000 AM Break
10:00 AM – 10:40 AM Tax Considerations for Farm Business Transfer, Greg Bouchard, Dyson School
10:40 AM – 11:20 AM Utilizing Insurance in Farm Business Transfers, Farm Family Insurance
11:20 AM - 12:20 PM Implementing Farm Family Business Succession: Building Trust and Creating Synergy
Robert Milligan and Sharon Danes
12:20 PM Lunch
Lake Ontario Fruit Program  
Cornell Cooperative Extension  
12690 NYS Rt. 31  
Albion, NY 14411

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Farmer Grant Applications Ready For Downloading

The Northeast SARE Farmer Grant application materials are now posted on the Northeast SARE website.  
Using the "for applicants" box on the right side of the page, you can download the application, get the budget justification template, and find useful information about writing a Farmer Grant proposal.  
The deadline for submitting is December 2 for awards in March.  
If you have questions that aren't answered in these materials, feel free to call Northeast SARE at 802-656-0471 or send e-mail to carol.delaney@uvm.edu

Harvest Maturity Fax Subscription

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

And mail to: Orleans County CCE  
Attn: Kim Hazel  
12690 NYS Rte. 31  
Albion, NY 14411

Email only –in the body of the email and as an Adobe pdf attachment  
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