



Healthy Fruit, Vol. 24, No. 18, August 16, 2016

Jon Clements, Author (unless otherwise noted) and Editor

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Upcoming meetings

NA

The way I see it

Jon Clements

Much speculation on whether apple maturity is early or not. Certainly some drop on earlier harvested varieties (aka Paulared) has been noted. And certainly trees have been under stress with lack of water -- a situation that (hopefully) is slowly changing. In fact, we have had 3.6 inches of rain here in Belchertown over the last 30 days. (Half of it in the last week.) So there is hope. I am done trying to predict early drop and/or maturity, I let the facts speak for themselves. I don't think we will get a good handle on it until the start of McIntosh harvest. If your orchard, however, has been seriously short of rain in the last month, expect trouble and be on your toes. See the comments about ReTain application from Dr. Duane Greene below.

Here are some results of maturity testing on a few early apples I did on Monday. I have put in parentheses the comparable data from 18-Aug, 2015 for Paulared, Sansa, and Zestar!. A note on the DA readings, made with the DA meter -- higher numbers mean a greener apple, lower numbers mean a more mature/ripe/yellow background color apple. Pretty much of little value on McIntosh-type apples, but works very good on apples that change background color from green to yellow as they mature, such as Gala, Honeycrisp, and Golden Delicious.

Also, please note the two embedded surveys below -- please take a minute to quickly answer. Your results are anonymous and confidential... :-)

Apple maturity report for August 17, 2016 Healthy Fruit

(18-August, 2015 data are in parentheses)

Date	Variety	Drop?	Diameter (inches)	Firmness (pounds)	Soluble Solids	Starch Index	DA Reading	Comments
16-Aug, 2016	Paulared	significant (yes, some)	3.4 (3.2)	13.7 (15.2)	11.3 (11.4)	4 (3.7)	1.00 (1.25)	Watercore; apples baked on trees from heat; Have to be picked despite poor quality, good for apple sauce (A green apple, but being harvested; significant fruit drop already)
16-Aug,	Sansa					3.7	(0.24)	Sweet; heavy, over-cropped; some watercore; ready to harvest, heavy crop decreases quality

2016		nil (none)	2.9 (3.0)	14.2 (16.2)	12.3 (13.9)			(Ready to pick based on background color (DA Reading) and soluble solids; light crop on tested fruit)
18-Aug, 2016	Zestar!	few (none)	3.1 (3.25)	14.3 (13.8)	13.5 (12.9)	4.2 (3.5)	0.51 (0.77)	Light-moderate crop due to April freeze; tart; some watercore; touch of sunburn noted; could barely be spot-picked based on color (Could certainly be spot picked based on red color)
18-Aug, 2016	Ginger Gold	none	2.9	21.7	12.3	1.5	1.43	Not ready to pick yet, at least on these heavily-cropped trees

Insects

Jon Clements

Apple maggot fly (AMF) continues to be caught in various numbers (including high counts) in our trapping network. Insecticide coverage should probably be maintained until September 1. Do you use the [AMF monitoring & respray dates \(for example in Belchertown\)](#) in [AgRadar](#)? Or the [NEWA Apple Insect Model](#) for AMF?

Please take half-a-minute to fill out this brief survey on your AMF control practices, use the scroll bar to complete the form and submit; your response is confidential and anonymous:

apple maggot fly (AMF) 2016 survey

Please fill out this brief form to help us understand more about apple maggot fly (AMF) management in your orchard.

Over the last 3 years, has AMF been a problem in your orchard?

- yes
- no
- don't know

Diseases

Needless to say, some fungicide coverage for summer diseases -- sooty blotch/flyspeck/rots -- needs to be maintained up until a couple weeks before anticipated harvest. Pristine is the gold standard fungicide for this time of year, however, other options include: Captan, Ziram, Topsin-M, Flint, Sovran, phosphites (+ Captan), among others. There are great IPM tools for managing sooty blotch/flyspeck sprays (i.e., risk level, when to spray, etc.) on [NEWA](#) and [AgRadar](#), use them!

Horticulture

J. Clements

Thoughts from Dr. Duane Greene on Retain application:

Use of ReTain in 2016

The weather is the determining factor providing guidance for the use of ReTain this harvest season. In most areas in Massachusetts we are experiencing very dry and hot weather. This combination of factors enhances the potential for early and enhanced fruit drop. In my estimation this is not a year to economize on the use of ReTain. All indications are that the season is early. I normally suggest application of ReTain 3 weeks before the anticipated mean harvest day. This year I am suggesting that the application perhaps should go on earlier. That time of application is

approaching rapidly if it is not here. I am suggesting that a full rate of ReTain be used on McIntosh. Reduced rates of ReTain are generally used on Macoun and Honeycrisp. Used good judgement and the experience gained in your orchard in selecting the rates to be applied on these cultivars. Early application of a full rate of ReTain will initially delay red color development. Although harvest may be delayed a little, it is far more preferable and profitable to have an apple with reduce color on the tree rather than a redder fruit on the ground. If early application does go on a follow up application will probably be needed especially if the fruit are to remain on the tree until the later part of September. The amount of ReTain used in the second application will be determined by individual harvest plans.

Use of ReTain on Cortland

Although Cortland is not a cultivar that has a drop problem it does respond extremely well to ReTain application. Observations made over the past several years showed that ReTain can delay ripening allowing maturation to occur during the cooler weather in October. There can be some reduction in red color development early but this is more than compensated for by improved coloring weather experienced later. The advantage of using high rates ReTain is that fruit quality is substantially increased while still maintaining condition. I am suggesting 1 pouch of ReTain applied 4 weeks before anticipated harvest and a second 1 pouch application 2 to 2.5 weeks later. Treated fruit should be harvested a little later. At harvest the taste of treated Cortland is outstanding. Red color is not a problem if allowed to remain on the tree for a short time longer. If fruit are harvested, and treated with SmartFresh they will store a longer time and retain excellent conditions and flavor. Last year ReTain treated Cortland receiving SmartFresh had 2 pounds greater flesh firmness than fruit just receiving SmartFresh when evaluated out of storage.

Guidelines for ReTain application

- Apply ReTain in a sufficient amount of water to ensure that flowers, fruits, and foliage receive thorough spray coverage using calibrated spray equipment. Adjust water volumes based on plant size and spacing. However, excessive spray application volumes resulting in spray runoff will reduce product efficacy.
- Avoid applications during the heat of the day. For best results, apply ReTain under slow drying conditions, e.g. early in the morning or at night, in order to maximize adequate absorption.
- Do not apply ReTain if rain is expected within 8 hours of application.
- Do not apply ReTain to plants of fruit under considerable stress (i.e., heat, water, disease, insect).
- Maintain application solution between pH 6-8.
- For optimal response, use ReTain with a 100% organosilicone surfactant. Use a final surfactant concentration of 0.05 to 0.1% (i.e. 6-12 oz surfactant per 100 gallons spray water) in the spray tank. To prevent possible spotting, use the 0.05% concentration when high temperature (in excess of 86°F) weather conditions prevail or are anticipated. Do not use a surfactant concentration greater than 0.1%. To reduce foaming, add the adjuvant last and minimize agitation.
- ReTain may be applied in a single application of 1 to 2 packets per acre (or less), or in two applications of 1 packet per acre (or less) each. See the [Supplemental ReTain Label](#) for additional information:
- ReTain has a 7 day pre-harvest interval (PHI) for Apple and Pear.

Please fill out this short form on your ReTain use in 2016 (use scroll bar for complete form and to submit). Your answers are confidential and anonymous. Thanks.

ReTain 2016 survey

Please fill out this form to tell us how you are using ReTain? Make sure you scroll down to complete form and Submit. Your answers are confidential and anonymous. Thanks.

Have you sprayed ReTain yet?

- Yes
- No
- Don't plan on using ReTain

Guest article

No Guest article this week...

Facebook Me

Follow me (jmcextman) on FB: <https://www.facebook.com/jmcextman>

YouTu.be

No YouTube video this week...

Useful links

UMass Fruit Advisor: <http://umassfruit.com>

Scaffolds Fruit Journal: <http://www.nysaes.cornell.edu/ent/scaffolds/>

Network for Environment and Weather Applications (NEWA): <http://newa.cornell.edu>

Follow me on Twitter (<http://twitter.com/jmcextman>) and Facebook (<http://www.facebook.com/jmcextman>)

[David Rosenberger's Blog](#)

[Peter Jentsch's Blog](#)

[Healthy Fruit archive](#)

The next official Healthy Fruit (maturity report) will be published on Tuesday, August 23, 2016. As always feel free to get in touch with any member of the UMass Fruit Team (<http://extension.umass.edu/fruitadvisor/team-members>) if you have questions or comments.