



Healthy Fruit

Volume 13, 2005

Prepared by the University of Massachusetts Fruit Team

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Upcoming Meetings/Events

Date	Meeting/Event	Location	Time	Information
August 18	NEFCON Research & Demonstration Field Day	Apex Orchard 153 Peckville Road Shelburne, MA	9 AM – 2 PM	Glen Morin, NEFCON 413-367-9578 nefcon@aol.com *

* RSVP by Monday, August 15, 413-367-9578.

Harvest predictions

Based on the Cornell model to predict last date of harvest for CA McIntosh, that falls on September 23 for Belchertown. (Three days later than last year, and probably right about 'average.') If you remember, the model is based on the average temperature for 30 days following full bloom (May 14 in Belchertown). If you also remember, it was very cool for at least two weeks following bloom, followed by much warmer than normal weather in early June. It has been warmer than normal this summer (11 days 90 F. or above recorded so far this summer in Belchertown), so that may advance maturity a bit, and often, lead to a drop-prone harvest season. (Particularly if the weather stays warm.)

You may be wondering when to apply ReTain on McIntosh for pre-harvest drop control and improved fruit quality this season? Conventional wisdom (and the label) suggest an application date 4 weeks (28 days) before anticipated 'normal' harvest. So, if you plan on picking McIntosh the week of Labor Day, ReTain could be applied anytime now. But, most growers won't be into the thick of McIntosh harvest until the week after Labor Day (September 11-17). That suggests an application window of next week, August 14-20. Recent research suggests that ReTain application as close as two weeks before anticipated harvest can be more effective than an earlier application, which opens the window even wider, however, still shooting for the period of August 17-24 is probably right for many Massachusetts orchards. Only *you* the grower know *your* harvest management scheme, so the best application date for ReTain is ultimately up to you. ReTain can also be applied to Cortland and Macoun, albeit a week or so later than McIntosh. Keep in mind ReTain should only be used on healthy trees (i.e., no drought or mite stress) and with a good crop load. And, it has a 21 day pre-harvest interval. Some other requirements for ReTain application include:

- Use one pouch (333 grams formulated product/acre) in sufficient water for good foliage wetting; do not alternate-row spray

- Use an organosilicone surfactant (Silwet L-77, Sylgard 309, Break-Thru, RNA Si 100) according to label directions
- ReTain should have 6-8 hours of good drying for uptake; do not apply when rainfall is imminent; optimum application conditions, however, are slow drying
- Apply alone with surfactant (do not tank mix with other products)
- On Gala, a half-rate of ReTain is suggested and has shown to be effective at preventing splits and greasiness. A full rate, however, seriously inhibits red color development on this apple

J. Clements

Dock Sawfly

I think we see this one all too often in Massachusetts. Following is an article excerpted from Scaffolds Fruit Journal, Geneva, NY, Volume 14, No. 20, August 1, 2005, <http://www.nysaes.cornell.edu/ent/scaffolds/>. J. Clements

This one always sneaks in during the waning days of summer. Following is a repeat of our annual write-up on this pest:

Before and during apple harvest in recent years, a number of growers and fieldmen have been unpleasantly surprised by the appearance of neat little (2 mm) holes bored into the side of their fruit, similar in appearance to those caused by a stem puncture. Although graders sometimes attribute this damage to apple maggot or European corn borer, cutting open these apples reveals a bright green worm with a light brown head, not feeding but lying inactive, in the burrow extending in from each hole. These are larvae of the dock sawfly, *Ametastegia glabrata*, a highly sporadic but nonetheless well documented apple pest that has been known to show up in our area since 1908.

Dock sawfly probably confines its feeding almost entirely to plants belonging to the buckwheat family (Polygonaceae), including numerous docks and sorrels, the knotweeds and bindweeds, or else wild buckwheat or alfalfa. In feeding on any of these plants, the larvae devour the leaf tissue and the smaller veins, eating out irregular holes in the leaves. Ordinarily, the midribs and the larger veins are untouched. This insect should not be confused with the related European apple sawfly, *Hoplocampa testudinea*, which has a whitish larva that lives and feeds in young apples, particularly prevalent in the eastern apple regions of N.Y.

Injury to apples by the dock sawfly is known to occur generally in the late summer and early fall, when the fruit is approaching maturity and the sawfly is searching for an overwintering site. The greater hardness of immature apples probably deters the larvae from burrowing into these, so although 4 generations per year have been identified, only the last one or two are of concern to apple growers. The injury to apples consists externally of the small round holes bored by the larvae, which after a few days show a slightly sunken, brownish ring around them and occasionally may be surrounded by a larger discolored

halo. These holes may occur anywhere on the surface, but are most numerous around the calyx and stem ends, or at a point where the apple touches a leaf or another apple, since it is easier for the larva to obtain a foothold here. Inside, the injury is usually more serious, since the larva often burrows to the core and usually hollows out a pupal cell somewhat larger than itself. Apples may have three or four, or sometimes even eight, holes in them of varying depths, but contain only one or two worms.

Since the dock sawfly does not feed upon any part of the apple tree, but must live on the above-mentioned succulent weeds, it becomes an apple pest only where these plants are growing in or around the orchard. There is little danger from this insect in orchards where the food plants don't exist. Likewise, the possibility of the larvae coming into the orchard from neighboring meadows, ditch banks, or roadsides is slight, for the larvae are incapable of finding their way over any extent of bare soil. The adults, though active, are not strong fliers, and it is not possible for the insect to travel far in this stage. Now would be a good time to assess the weed situation in your orchard and make plans for such selective herbicide applications as may be appropriate regarding this insect. Even though common wisdom says this sawfly is a pest only every 10-12 years, this is only an average estimation, and it's not a bad idea to anticipate the unexpected when hardly any season is considered to be "average".

(Information adapted from Newcomer, E. J. 1916. The dock false-worm: An apple pest. USDA Bull. 265, 40 pp.)

Note: the next Healthy Fruit will be published August 23, 2005.

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