



Healthy Fruit

Volume 11, 2003

Prepared by the University of Massachusetts Fruit Team

Issue 8 – May 28, 2003

Current Degree Day Accumulations*

Location	Base 32F	Base 43F	Base 50F
Belchertown, UMass CSO observed (01/01/03 – 05/27/03)		691	430
Belchertown, UMass CSO, SkyBit™ (01/01/03 – 05/27/03)		443	NA
Belchertown, UMass CSO, observed (04/15/03 green-tip – 05/27/03)	936		

*Base 32 from green-tip used for scab ascospore maturity;
Base 43 and Base 50 from January 1 used in insect models.

Upcoming Meetings/Events

Date	Meeting/Event	Location	Time	Information
June 10-12	UMass Fruit Team Twilight Meetings	TBA	5:30 PM	Jon Clements 413-478-7219 Wes Autio 413-545-2963

Much Adieu About Mildew

High humidity and temperatures between 60 and 80 F. favor powdery mildew development in apple. Sound familiar? Conditions have been ripe for the development of this fungal disease. Very susceptible cultivars include Cortland, Baldwin, Gingergold, and Honeycrisp. Powdery mildew infection results in stunted terminal growth and fruit russet in severe cases. Normally, a good scab fungicide program that includes a mildewcide such as Nova, Rubigan, Procure, Flint, or Sovran will control mildew. The period around pink bud is critical to keep infections from starting, however, fungicide coverage should be maintained until terminal growth stops during periods of warm, humid weather. (Like right now!) Young trees that are sometimes overlooked in the spray program are at high risk of mildew infection, which can of course seriously stunt their growth.

Borer Trunk Spray Timing Now

Any time now is a good time to target borers of apples and peaches with a trunk spray of Lorsban 4E. A single application will give season-long control of borers, which have become very troublesome in some orchards. Remember that Lorsban 4E can only be used as a directed trunk spray and cannot contact fruit or foliage. Give the trees a good soaking of the trunk and soil-line with a hand-gun spray.

These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide - it is the legal document.

Pardon Us...

“If you find mistakes in this publication, please consider that they are there for a purpose. We try to print something for everyone, and some people are always looking for mistakes.” (quoted from a weekly paper in Clermont, Florida)

Thinning in the Rain?

The bloom period was generally protracted and cool with intermittent periods of opportunity for bee flight and pollination. It may be too early to fully assess the extent of pollination and its effects on initial set. Early pollinated fruit are starting to grow with sizes ranging from 5.0 to 6.5 mm (May 27). The weather forecast for the next few days predicts a cool period with the possibility of showers. Fruit is unlikely to grow more than 0.5 mm per day. We suggest that you assess fruit size at the end of the week. Trees with spurs carrying several fruit 7 to 9 mm and relatively uniform in size will require more aggressive thinning than just a carbaryl spray. Further, if initial set is heavy, a thinner in addition to carbaryl is recommended. If spurs have a fruit that is clearly large, breaking up these clusters with carbaryl alone may be possible. All thinners are effective during the 7 to 12 mm stage of fruit development.

Our recommendation is to apply all thinners at a time when at least 3 days of warm temperatures (75EF) are forecast. Start to look for this thinning window of opportunity when fruit reach 6 to 7 mm in size. All indications are that this “best time to thin” will follow this current period of cloudy cool weather. It is important to be ready to act when the weather is favorable. Unsettled weather is expected for the next several days. Do not be concerned if fruit continue to size. They will be susceptible to a thinner when the next warm sunny period arrives.

Prolonged cloudy and rainy periods can enhance thinner response. This situation is frequently experienced by orchardists in the Mid Atlantic and Southeast United States, but rarely here in New England. Are we experiencing one of those periods where caution should be exercised? I do not think so. For cloudy and rainy weather to substantially increase response to thinners two criteria must be met; warm temperatures should accompany the cloudy weather (75EF or higher for several days), and this warm cloudy period should occur after the application of a thinner.

The Second Apogee Application

The first Apogee application should have been made about 2 weeks ago. You should start to see the first signs of growth retardation 10 to 14 days after application. We recommend a second application of Apogee 2 to 3 weeks after the first. An Apogee rate of 2 to 3 oz./100 gal based upon tree row volume diluted will probably all that will be required for this second application. It is important to include in your Apogee spray a surfactant and ammonium sulfate or a water conditioner.

Insects and Mites

Due to the recent cool and rainy weather, there's not a lot of insect activity to report this week. Most growers have completed petal fall sprays, and some have treated again for PC. As suggested in last week's HF, some growers were able to delay their petal fall sprays of organophosphates due to use of Carbaryl as a thinner.

These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide - it is the legal document.

Plum Curculio

Ron reports that we have experienced 2 waves of PC immigration so far this year, one around May 7-8 and another on the 19th through the 21st. Both were about equal in size. Trap results indicate PC have been found from the perimeter row to as much as 50 meters into the orchard. On May 27, egg-laying stings were seen on fruit at the UMass Cold Spring Orchard that were about 8 millimeters in diameter, generally thought to be about the smallest that PC will attack. Given that PC likely have penetrated beyond orchard perimeters, first sprays for this insect should cover whole blocks. Because recent rains probably have reduced petal fall insecticide residues, blocks where PC damage is traditionally high should be monitored for egg-laying scars. If scars are confined to perimeter rows, and at least one whole block spray has been applied, spot spraying of these exterior rows may be satisfactory.

European Apple Sawfly

Although a few monitored blocks had shown captures of up to 20 EAS on individual traps, generally EAS numbers were low this year.

Mites

Cool wet weather is not conducive to mite population increases, especially where bloom treatments have been applied.

Leafminers

Private consultants have yet to report evidence of sap-feeding mines in monitored blocks.

Apple Scab: It's Not Over

Even though we are in the final phase of primary scab, it is by no means over. Squash mounts performed on leaves collected from abandoned trees in Belchertown on Tuesday showed that all the spores are mature, but about 1/3 of them have not yet been released. Continued protection is the best strategy.

These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide - it is the legal document.