Issue 10 – June 12, 2003

Current Degree Day Accumulations¹

Location	Base 43F	Base 50F
Belchertown, UMass CSO observed	966	606
(01/01/03 - 06/11/03)		
Belchertown, UMass CSO, SkyBit TM	790	NA
(01/01/03 - 06/11/03)		_
Belchertown, UMass CSO, observed		195^{2}
(05/25/03 petal fall - 06/11/03)		

 $^{^{1}}$ Base 43 and Base 50 from January 1 used in insect models.

Upcoming Meetings/Events

Date	Meeting/Event	Location	Time	Information
July 23	Massachusetts Fruit	Apex Orchard	TBA	Wes Autio
	Growers' Assoc.	Shelburne, MA		413-545-2963
	Summer Meeting			www.massfruitgrowers.org

Strip and Pinch

A reminder that now is the time to 'strip' young, upright shoots that are competing with the leader in young apple trees being trained to a central-leader or vertical-axis training system. Remove the three or four competing shoots that originate directly below the shoot you want to keep as the leader. Also, 'pinching' or (pruning) young shoots in the top of young vertical-axis trees will slow growth and promote bud formation. Just pinch-out the shoot tip (2-3" back) of 6-12" long shoots in the top of the vertical-axis tree.

Last-chance Thinning

Most Massachusetts orchards have a fruit size range that is approaching 15-20 mm. IF you still feel more thinning is necessary, at this timing there are two options: the first is Sevin plus oil (1/2 to 1 lb per acre and one quart respectively). The second option is ethrel at 300 ppm plus Sevin (1/2 to 1 lb per acre). Ethrel can cause excessive thinning at higher rates, so be careful. If you have made a recent thinning application, it's probably best to wait and see what happens as we anticipate a good June drop of under-sized fruit.

Transition from Primary Scab to Summer Disease Season in Apple Blocks

Despite endless rains, we have been seeing and hearing about relatively little scab in blocks across the state. Primary scab is just about over, although some young lesions are showing up in blocks that have been without a spray for 11 or so days. These lesions and secondary scab from early infections should be cleaned-up These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide - it is the legal document.

² 340 Degree Days Base 50 used for plum curculio spray cut-off

with fungicides that offer good to excellent post-symptom activity (Flint, Sovran, Syllit, Topsin M) if you have active lesions or fungicides with good to excellent pre-symptom activity (Nova, Procure, Rubigan, Syllit, Topsin M) if you are beyond the lime limit for post-infection activity but don't see active lesions when you check your trees for scab. If you are well-protected, Captan is good if it is neither too hot nor too cold, and is very good for protection and retention and good for re-distribution. It does not have pre-symptom or post-symptom activity. Flint and Sovran can be tank-mixed with Captan. We are double-checking manufacturers to see if they can be tank-mixed with Syllit. Most likely they can.

At this time, summer disease ascospores are maturing and releasing from alternate host plants in hedgerows and wooded areas adjacent to blocks of apple trees. Most researchers agree that this first cycle of the disease occurs mostly in the border areas and rows of apples closest to the borders. A fungicide applied at this time that is effective against late scab and summer diseases (Flint, Sovran, Captan) would be a smart move. The first cycle of summer disease activity could be knocked-down, decreasing the second cycle which peaks about a month later. Using calcium chloride at standard rates with summer sprays (remember to add the vinegar to adjust the acidity) is a cheap, safe way to decrease the activity of summer diseases.

Plum Curculio

Last Friday (June 6) saw the biggest influx of PC into monitored blocks since May 20. The weather over the past weekend was conducive to egglaying, and fresh scars can now be found readily. In Ron's monitored blocks, PC injury jumped to 4% on perimeter rows, up from 1% a week before. Assuming at least one whole-orchard PC spray has gone on in all blocks, monitoring perimeter rows and spraying those rows if fresh injury is found, should provide acceptable levels of PC control while reducing cost of pesticides. Degree day information indicates that we are still not near the likely end of PC immigration into commercial orchards.

Mites

A few adult mites have been found in monitored blocks, but pre-bloom oil or miticides and weather conditions mean that mites are not yet a problem needing additional management.

Lorraine Los' UConn pest newsletter recently mentioned a report from Art Agnello's Scaffolds newsletter of June 2, 2003 concerning research in New York State on summer oil for European Red Mite. Cornell concluded that this is the time of year when a summer oil program might be considered as an alternative preventive approach to ERM management, particularly considering the recent cool spring weather. Field research trials conducted in commercial and experimental apple orchards in western N.Y. showed that highly refined oil in a seasonal program to control mites was very effective. Another positive aspect of the summer oil program is that mite can not become resistant due to it's suffocating effects.

Some examples of summer oils are: are Sunspray Ultrafine Spray Oil (Sun Refining & Marketing, Philadelphia), Stylet-Oil (JMS Flower Farms, Vero Beach, FL), and Omni Supreme (an Exxon Mobil product formulated using Orchex 796 and distributed in our area by Helena.

Leafminers

The majority (17 out of 20) of monitored blocks had relatively low trap leafminer captures and consequently showed low sap-feeding mine numbers. In all but later-developing areas of the state, it is too late to consider treating for leafminer. Later areas should continue to monitor mines and treat this week if needed. Bear in mind that Cornell researchers now believe that many cultivars (but not McIntosh) can tolerate substantial numbers of mines per leaf with no ill effect on the crop.

Pear Psylla

Adults can currently be found laying eggs.