

# Healthy Fruit

Volume 11, 2003

Prepared by the University of Massachusetts Fruit Team






## Issue 5 – May 6, 2003

### Current Degree Day Accumulations\*

Location	Base 32F	Base 43F	Base 50F
Belchertown, UMass CSO observed (01/01/03 – 05/06/03)		422	266
Belchertown, UMass CSO, SkyBit™ (01/01/03 – 05/06/03)		294	NA
Belchertown, UMass CSO, observed (04/15/03 green-tip – 05/06/03)	437		

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

### Current Bud Stages

Location	McIntosh	Gala	Pear	Peach	Sweet Cherry
Belchertown UMass CSO (05/05/03)					
	pink	early pink	first bloom	bloom	bloom

### Upcoming Meetings/Events

Date	Meeting/Event	Location	Time	Information
May 13	UMass Fruit Team Twilight Meeting	UMass Cold Spring Orchard, Belchertown MA	5:30 PM	Jon Clements 413-478-7219 Wes Autio 413-545-2963
May 14	UMass Fruit Team Twilight Meeting	Tougas Family Farm, Northborough MA	5:30 PM	Jon Clements 413-478-7219 Wes Autio 413-545-2963
May 15	UMass Fruit Team Meeting and URI Extension Twilight Meeting	Knight Farms, Gloicester RI	5:30 PM	Jon Clements 413-478-7219 Heather Faubert 401-874-2750

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## If I Were You And Apple Scab...

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Pink is typically the start of highest risk for apple scab infection. This is because spore maturity is approaching 50%, spur leaf growth is accelerating, and the weather is invariably showery. Spray weather has been good—most of you have had a chance to cover-up with protectant fungicides. But, don't let your guard down now. A good strategy for this week—particularly if it remains showery—is to put on another fungicide application using a strobilurin fungicide at full rate *or* half-rate in conjunction with a protectant fungicide. This should give you good scab, powdery mildew, and black rot (leaf spot) control.

## Peach Brown Rot Risk High

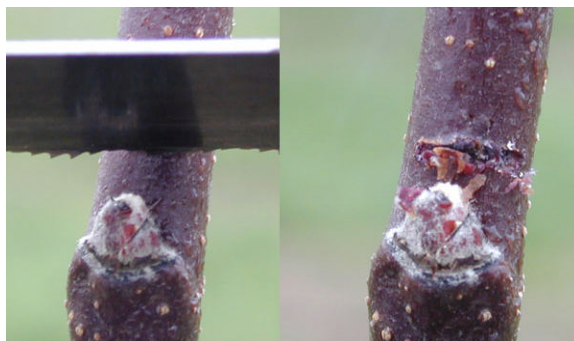
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Peaches are very susceptible to brown rot (blossom blight) during bloom. The recommendation is to maintain fungicide coverage during bloom if conditions warrant, i.e. wet, rainy weather persists. This may mean spraying every few days during bloom. Best brown rot fungicide bets include Indar, Orbit, and Elite. Bravo, Captan and sulfur will also work, but less effectively.

## Notching Promotes Branching On Newly Planted Trees

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Newly planted apple trees will benefit from 'notching' to promote lateral branch development. Most commonly used on the leader of 1<sup>st</sup> leaf trees, the procedure is simple: a hacksaw blade is used to make a slice or cut right above a dormant bud on year-old wood (often the leader, or could be scaffolds). The cut has to be just deep enough to break through the bark, taking care to not go too deep. The cut should be no longer than approximately 25% of the circumference of the leader. (See picture.) If effective, notching will promote a nice lateral shoot to develop from the bud directly below the cut.



## Fire Blight Risk

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Some Massachusetts orchards have experienced sporadic fire blight outbreaks in past years. Young orchards with susceptible cultivar/rootstock combinations are at risk: these include Gala, GingerGold, Fuji, and Paulared (among others) on M.26 and M.9. In a nutshell warm temperatures preceding and during bloom favor the likelihood of an infection—a little rain and wind helps too. If these conditions develop (they are NOT in the current forecast) and/or you have a history of fire blight or susceptible cultivar/rootstock combinations in your orchard(s), then a spray of streptomycin (Agrimycin) is advised. The strep spray must precede or follow an infection 'event' by 24 hours. The best way to determine the need for a strep spray is to use a model such as MaryBlyt or Cougar Blight. Output from both models from the UMass Cold Spring Orchard is being posted to the Massachusetts Fruit Growers' Association 'Orchard Weather' web site at <http://www.massfruitgrowers.org/weather/belchertown/>. Keep in mind the model output is based on weather data collected at the UMass Orchard—your microclimate will be different, but you can certainly use it as a guide.

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## **Healthy Fruit Insects & Mites**

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Tree Development is at pink in earlier portions of the state although still at Tight cluster in later areas. Now is a good time to deploy white sticky traps to monitor European apple sawfly, and to place shingles or slates to serve as vole monitoring stations.

### **Tarnished Plant Bug (TPB)**

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Over the past week, there has been some increase in TPB captures on sticky traps, although few monitored sites have reached the Pink threshold of 5 TPB per trap. Overall, TPB captures in commercial orchards are considerably less than they were last year at this same developmental stage.

### **Leafminers (LM)**

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Leafminer sticky trap captures are also up from the previous week, reaching 50-100 per trap in a very few localized areas. An average capture of 9 moths per trap in McIntosh would indicate that a treatment for leafminer may be warranted.

### **Plum Curculio (PC)**

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After a relaxing winter spent drinking rum on the beaches in the Caribbean, “The Curc” is back in Massachusetts. Actually, Adult PC began migrating from their overwintering sites in woodland duff and other protected sites outside our orchards about 9 days ago and have been coming in in small numbers ever since. Movement of these first adults around Tight Cluster is consistent with what has been seen in previous years.

### **Pear Thrips (PT)**

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This insect is typically more likely to be a pest in western regions of the state, particularly those areas that have a large number of sugar maples and red maples in adjacent woods. So far, few PT have been seen, and in any event, special sprays for thrips are not likely to be needed, especially if one of several materials is applied pre-bloom against other pests.

### **Rosy Apple Aphids (RAA)**

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Although they can sometimes be found, particularly on cultivars such as Cortland, Golden Delicious, and Jonagold, RAA are a relatively infrequent pest in Massachusetts’ orchards. If a visual observation of terminals that show curling leaves reveals a pinkish-gray aphid with a waxy coating and long protuberances (“cornicles”) from the abdomen, then you have RAA. On young trees, RAA can cause substantial leaf curling and set the trees back substantially, while on older trees their damage is primarily fruit deformation and stunting.

### **Mites**

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Few mites have been seen so far in commercial orchards.

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## Putting It All Together

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It's probably too late in most areas to apply oil for mites, but if either oil, Apollo or Savey have been used, in most years, growers can wait until July to evaluate if other mite treatments are needed. Especially if no sticky traps have been deployed, the optimum time to evaluate the need for leafminer treatments is at first cover. It is still too early to consider the need to treat for PC, although certain materials applied against other pests (i.e. Avaunt, Guthion, Imidan) pre-bloom should take care of any early entering PC.

If treatment for TPB is needed at pink, several materials are labeled for the pest, although material choice will depend on the severity of the problem. Avaunt, Ambush, Pounce, Asana and Digon are highly effective, while Guthion, Imidan and Thiodan are best used when pressure is not extreme.

Digon, Thiodan, Ambush, Pounce, and Asana used for TPB will also give fair to good control of Rosy aphids if applied at pink. Although its effectiveness against TPB is not known, Esteem 0.86 EC is also registered against RAA. In a 2002 trial in Michigan, Esteem gave excellent control of RAA, although no application was conducted at pink. Pink use of Esteem, as well as Intrepid, Ambush, Pounce and Asana may eliminate the need for a later treatment for first brood leafminer larvae. In choosing materials, remember that pyrethroids (e.g., Ambush, Asana, Pounce) as a class of compounds are highly toxic to important predators, especially if used after pink.

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