

Fruit IPM
5/27/14

Peach

Oriental Fruit Moth (OFM): The first OFM brood is 100% hatched in southern counties and about 80% hatched in northern counties. All insecticides should have already been applied for the first flight of this insect.

Tufted Apple Budmoth (TABM): Timings for TABM control are outlined below. This is now a minor pest, due to its increased control over the last 6 years. TABM adults just started to emerge in northern counties, so any treatments for this pest are at least a couple of weeks in the future. If you are a grower who did have TABM damage last year, you are advised to use the timings that follow:

	Conventional, Diamides	Conventional, Diamides	Intrepid, Rimon	Bt
County Area	AM	EM	EM	EM
Southern	1 st about 6/2-4; 2 nd 6/11-13	1 st 6/6-6/9	1 st 6/4-6/13	1 st 6/9-6/9
Northern	About 2 weeks away			

Plum Curculio (PC): PC activity continues, however in southern counties, treatments applied this week should provide control until egg laying activity ceases in early June as long as severe rain storms do not wash off insecticide.

San Jose Scale (SJS): Scale crawlers usually emerge about the first week of June, but this may be slightly later this year. If you have scale infestations on your trees, it is important to note if crawlers are present, even if you treated with oil in the early spring. If crawlers are present then treatment options include Esteem, Movento, Centaur, and Diazinon. Esteem and Movento should be applied at the beginning of crawler emergence, Centaur should be applied at peak crawler activity (usually 2-3 weeks after first emergence). Diazinon is labeled for one in-season application on stone fruit (4#/acre of the 50W limit) and two in season applications on apple. On apple, the diazinon label lists a dormant to delayed dormant application for scale and a foliar application for woolly apple aphid. The in-season foliar applications may cause russet, but have worked in the field for scale crawlers as long as applications are made 1-2 weeks after the start of crawler emergence and again 2 weeks later. Actara has a label for San Jose Scale suppression on apple. Field experience has indicated good efficacy against scale crawlers.

Thrips: Thrips tend to start building up at this time of year in weedy groundcovers and in hedgerows with flowering shrubs. We have seen very few thrips so far this year. More on this insect later as populations develop.

Anthracnose: Wet seasons are favorable for anthracnose infections. The varieties Klondike, Harrow Beauty, Snow Giant, and Sugar Giant seem to be particularly susceptible. Growers may find it useful to protect against anthracnose, especially in

blocks that have a history of the disease. For all practical purposes this means avoiding the use of sulfur in those blocks, and substituting Captan (2.5# 80W; 4# 50W) for the next several weeks. Ziram @4.5-8#/ac is also effective. Materials containing strobilurins (Pristine, Gem, Luna Sensation, Merivon) should be effective.

Apple

Codling Moth (CM): The following chart updates application timings for southern and northern counties. Overall, trap counts are low, but a few sites still show populations above treatment levels, even though 2 timed treatments may have already been applied.

Codling Moth Degree Day Timing								
County Area	Application and Insecticide Type							
	Rimon: 75-100DD + 14-17 days later Intrepid: 150 + 450 DD	Intrepid 150 + 450 DD		Diamides - Altacor, Voliam mixes: (150- 200 DD) + 14-21 days later		Cyd-X, Carpovirusine 250 DD + every 7-9 days during brood hatch (later if first spray is an IGR)		Standard Insecticides, Diamides – Belt, Tourismo 250 DD + 550 DD
DD	50	100	150	150	450	250	250	550
Southern	Past	Past	Past	Past	6/4	Past	Past	6/6
Northern	Past	Past	Past	Past	About 6/14-15	5/30	5/30	About 6/19-20

Tufted Apple Budmoth (TABM): See peach section.

Fire Blight: The shoot blight phase of the disease is present in some locations at very low levels in blocks affected by last week's hail storm. A good online reference is the UMASS Fact Sheet on [fire blight control](http://extension.umass.edu/fruitadvisor/sites/fruitadvisor/files/fact-sheets/pdf/F-133.pdf).
<http://extension.umass.edu/fruitadvisor/sites/fruitadvisor/files/fact-sheets/pdf/F-133.pdf>

Pear

Pear Psylla: Egg laying is increasing. Emergence of nymphs will increase over the next week. If you have pears and psylla are present, then target treatments for the young nymphs (softshells), if you have not done so already. See last week's newsletter for suggested materials.

Scouting Calendar

The following table is intended as an aid for orchard scouting. It should *not* be used to time pesticide applications. Median dates for pest events and crop phenology are displayed. These dates are compiled from observations made over the past 5-10 years in Gloucester County. Events in northern New Jersey should occur 7-10 days later.

Pest Event or Growth Stage	Approximate Date	2014 Observed Date
1/4" Green Tip Red Delicious	March 27 +/- 10 Days	April 11
Tight Cluster Red Delicious	April 8 +/- 10 Days	April 17

Oriental Fruit Moth Biofix	April 8 +/- 10 Days	April 14
Pink Peach (Redhaven)	April 10 +/- 9 Days	April 13
Pink Apple (Red Delicious)	April 13 +/- 11 Days	April 24
Full Bloom Peach (Redhaven)	April 16 +/- 7 Days	April 21
Green Peach Aphid Observed	April 16 +/- 16 Days	May 1
Full Bloom Apple (Red Delicious)	April 20 +/- 9 Days	May 3
Petal Fall (Redhaven)	April 21 +/- 9 Days	May 2
Petal Fall (Red Delicious)	April 27 +/- 13 Days	May 11
Shuck Split (Redhaven)	April 29 +/- 7 Days	May 11
Tufted Apple Bud Moth Biofix	May 4 +/- 10 Days	May 11
Second generation Pear Psylla Hatch	May 29 +/- 3 Days	Not yet observed
Pest Event or Growth Stage	Approximate Date	2014 Observed Date
1/4" Green Tip Red Delicious	March 27 +/- 10 Days	April 11
Tight Cluster Red Delicious	April 8 +/- 10 Days	April 17

Blueberry

Primary Insects to Control: The primary insects that should be controlled in the first post pollination spray are plum curculio, with materials that also are effective for Leps (like cranberry fruitworm). The following (2nd) treatment will deal with cranberry fruitworm as the primary target (if present), or aphids. This second treatment may also need to deal with the first spotted wing drosophila.

Plum Curculio (PC): Adults are still active, but at very low numbers. This should further decrease as the first post pollination insecticides are applied that target PC.

Aphids: Some aphids are present in a few samples, but at very low levels. Aphids were seen 1 site where small colonies were present on over 10% of terminals.

Spotted Wing Drosophila (SWD): Traps are going up this week to detect if there are any significant numbers of adults present and when they are flying. More on this in the next few newsletters.

Leafrollers and Other Leps: Out of the 45 samples taken last week, 6 samples were positive for leafroller larvae and other Leps in flower clusters and growing shoots. All samples were well below treatment levels.

Cranberry Fruitworm (CBFW): The first adults are being seen in traps at an average of 1.4 adults per trap. These are low numbers and should increase over the next week to 10 days.

Mummy Berry: Some mummy berry primary strikes were seen in isolated locations. This should not be a problem with the low numbers of strikes we have seen.



Primary mummy berry strike during 5/19-23

Tree Fruit Trap Counts – Southern Counties

Week Ending	STLM	TABM_A	CM	AM	OFM-A	DWB	OFM-P	TABM_P	LPTB	PTB
4/13					0		0			
4/20	14				5		0			
4/27	0				51		1			
5/3	19				51		1			
5/10	41	0	3		36		5	0		
5/17	21	2	12		15		6	4	27	
5/24	1	10	6		5	1	7	34	1	10

Tree Fruit Trap Counts – Northern Counties

Week Ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OBLR	OFM-P	TABM-P	LPTB	PTB
4/13	1										
4/20	2							0			
4/27	71.5		0					1.1			
5/3	41		0.0		3.5			1.3			
5/10	91.5	0.0	0.0		31			18.2	0.0	0.0	
5/17	67.5	0.0	4.5		57.7			21.4	0.0	0.0	
5/24	35.5	2.3	5.6		12.7			4.5	1.4	10.4	0

Blueberry Trap Counts – Atlantic County

Week Ending

CBFW

5/24	1.2		

Blueberry Trap Counts – Burlington County

Week Ending

CBFW

5/24	2		