

Fruit IPM

6/21/16

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Peach:

Brown Marmorated Stink Bug (BMSB): Adults are present in traps, usually 1-3 per trap. Low levels of fruit infestation are also present. Treatments in both peaches and apples should include BMSB effective materials in weekly border sprays or alternate middle treatments.

Oriental Fruit Moth (OFM): The second flight is underway in all counties. Populations in southern counties are very low. Treatment timing will depend on the material that you choose to use. Please see the insecticide timings below for insecticide type:

OFM 2 nd Generation Timing				
County/Region	Degree Days by 6/21 base 45	Insecticide Type		
		Conventional	Intrepid / IGRs	Diamide (Altacor, Belt, Voliam products)
Gloucester – Southern	1271	1 st – past 2 nd – 6/28-6/29	1 st – past 2 nd – 6/26-6/28	1 st – past 2 nd – 6/25-6/27
Hunterdon – Northern	1107	1 st – 6/23-6/25 2 nd – 7/4-7/6	1 st – 6/21-6/23 2 nd – 7/2-7/4	1 st – 6/20-6/23 2 nd – 6/31-7/4

Tufted Apple Budmoth (TABM): We are at the end of the first generation treatments. The last timings for the first generation are outlined below:

TABM First Generation Treatment Timing					
County/Region	Degree Days by 6/18 base 45	Insecticide Type			
		Conventional, Diamides	Conventional, Diamides	Intrepid, Rimon	Bt
		AM	EM	EM	EM
Gloucester - Southern	913	4 th 6/20-21	past	past	past
Hunterdon - Northern	891	4 th 6/21-22	6/18-20	6/18-20	6/18-20

Thrips: Thrips should be treated where they are active. Susceptible early varieties include Easternglo, PF-5, and Sentry. Delegate @ 6-7 oz/ac is effective for thrips. The addition of a non-ionic surfactant can help improve control. Lannate SP @ 1#/A (or LV @1.5-3 pt/A) can still be effective in some orchards. Prolonged periods of dry weather favor thrips buildup, so make sure to check your fruit during this kind of weather pattern.

Brown Rot: Little brown rot is present, but this is normal for this stage of development. If captan has been added to the spray tank in repeated sprays, then you are probably going to have an easier time controlling preharvest brown rot later.

Physiological Deformity: Fruit that has internal damage may be bleeding or malformed. Fruit that is malformed and cracking probably have shattered pits. Bleeding fruit may be confused with bacterial spot or fresh cat-facing; but the bleeding fruit is actually from a damaged pit. Damage from cat-facing or bacterial spot will be shallow injuries or just below the skin. In addition bacterial spot will have black pitting under the sap. Bleeding from a damaged pit will show sap exuding from the skin and deep into, or all the way through the flesh to the pit. An easy way to distinguish the type of damage is to cut into the fruit and see how deep the bleeding goes into the flesh.

Apple:

Codling Moth (CM): Codling moth trap captures are quite high on several farms in northern counties. Where the flight stands at less than 5 males per trap per week, no insecticides are needed for this pest. If you have treated with pyrethroids, Imidan or Lannate, then switch to another chemistry, such as Altacor, Belt or Voliam products, or Delegate; or plan on using Madex starting with the next flight.

Fire Blight: The shoot blight phase of the disease is still present in scattered areas throughout the State. Where blight is present, pruning out infected shoots is important now especially if thunderstorms are predicted.

Scouting Calendar Tree Fruit Southern Counties

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 since 1995 in Gloucester County. Events in northern New Jersey should occur 7-10 days later.

Pest Event or Growth Stage	Approximate Date	2016 Observed Date
Full Bloom Peach (Redhaven)	April 9 +/- 14 Days	April 5
Codling Moth Biofix	April 27 +/- 13 Days	April 22
Full Bloom Apple (Red Delicious)	April 22 +/- 11 Days	April 20
Petal Fall (Redhaven)	April 22 +/- 10 Days	April 22
Petal Fall (Red Delicious)	April 27 +/- 14 Days	May 8
Shuck Split (Redhaven)	April 30 +/- 11 Days	May 2
First PC Oviposition Scars Observed	May 3 +/- 18 Days	May 10
Tufted Apple Bud Moth Biofix	May 4 +/- 10 Days	May 14
Bacterial spot observed on peach leaves	May 15 +/- 21 Days	May 26
Rusty spot symptoms	May 12 +/- 19 Days	May 30
OFM Flagging observed	May 12 +/- 5 Days	May 31
Second Generation Pear Psylla Hatch	May 25 +/- 8 Days	May 29
Bacterial Spot observed on stone fruit	May 25 +/- 33 Days	June 2
Peach Scab Symptoms	June 14 +/- 13 Days	Not yet observed
Pit Hardening	June 15 +/- 9 Days	June 11

Tree Fruit Trap Counts – Southern Counties

Week End	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
4/9	4				55		0			
4/16	48				25		3			
4/23	14	0			89		9			
4/30	20	0	32		81		9	1		
5/7	0	0	7		38		3	0	0	
5/14	4	1	7		23		0	0	16	
5/21	0	0	7		35		1	1	44	
5/28	0	8	9		9		0	8	42	
6/4	0	0	15		11		0	8	52	
6/11	20	25	8		11	47	3	27	90	
6/18	5	13	1		0	45	0	17	33	

Tree Fruit Trap Counts – Northern Counties

Week End	STLM	TABM-A	CM	AM	OFM-A	DWB	OBLR	OFM-P	TABM-P	LPTB	PTB
4/2	0.3							0.0			
4/9	4				0.0			0.0			
4/16	20				0.0			0.0			
4/23	34				4.3			7.0			
4/30	59		0.4		10.3			10.8			
5/7	122		0.1		1.8			2.3			
5/14	14	0.2	1.3		3.0			1.2	0.1	0.0	0.0
5/21	32	1.1	3.7		5.8			1.7	0.6	4.2	0.0
5/28	16	2.0	2.8		11.0	8.8	0.0	1.2	0.3	6.9	0.0
6/4	23	3.7	3.1		1.2	5.2	0.0	1.6	11.3	20.3	0.8
6/11	191	16.6	4.0		0.8	3.4	0.0	0.2	29.9	12.0	1.0
6/18	37	8.0	4.6		5.4	0.6	0.0	1.7	15.4	10.2	2.3

Blueberry:

Aphids: Aphid populations are still hanging on as we enter a transition period between weekly SWD treatments and the last of the aphid control. Monitoring showed an average of just over 7% of shoots infested, most on the bottoms of bushes, with a high of 72% of infested terminals.

Spotted Wing Drosophila (SWD) and Aphids: We have over 100 traps placed to monitor SWD, but have not caught any adults as of this date. A few additional SWD adults have been captured in research plots. Aphids should have been already been controlled. However, if you still have aphid populations, then Lannate or Exirel can both be used for SWD and aphids at the low labeled rate. If you have already used at least one application of Lannate, and still have aphids, then assume either that the coverage is not adequate or the chemistry is not effective, but don't use repeated applications in the same manner for something that is not going to work.

Oriental Beetle (OB): OB adults continue to emerge, mate and lay eggs that will hatch and produce grubs that consume blueberry roots. This is the first week that we have seen a significant increase in adult activity. Populations and infestation rates will vary greatly between individual fields and farms. Remember, control of this insect targets the young developing grubs (unless you are using mating disruption). Adults will continue to emerge from the ground over the next several weeks. While the presence of adults might seem worrisome, trying to control the OB population by targeting adults will not work, and will only cost you needless expense. If you are using Admire, it must be used with a 7 day PHI, and prior to the formation of 3rd instar larvae (grubs), usually by the middle of July. Average counts this past week were 70 adults per trap, with a high of 635 adults per trap.

Anthracnose: Several farms were seen this past week with low levels of anthracnose-infected fruit on first picking Duke. It is unusual to see infected Duke. The presence of the disease is likely attributed to a light fungicide program during bloom and just after. However, if Duke fruit have anthracnose, then growers should be particularly aware of any disease presence on Bluecrop and other later varieties. Please the last Blueberry Bulletin for a table of fungicide options.

Cranberry Fruitworm (CBFW) and Cherry Fruitworm (CFW): Infested fruit is present at low levels, and has not really changed since last week. This insect no longer merits a treatment decision.

Grape

Grape Berry Moth (GBM): We set the wild grape bloom Biofix for May 25 in Elk Twp, Gloucester County. Working forward to 800 to 810 DD₄₇ from that date marks the treatment timing for the second generation in commercial vineyards. The NEWA site in Elk Twp predicts a treatment date of 6/26, while the instrument in Blue Anchor predicts a treatment date of 6/24. These dates are for using Intrepid, Altacor/Belt or Voliam products. If using Delegate, an OP, carbamate, or pyrethroid chemistry, then plan on a timing 2-3 days later.