

## Fruit IPM for the Week Ending 8/9/13

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**Brown Marmorated Stink Bug (BMSB):** Only single adults are being seen in the experimental traps we have placed in both northern and southern counties, although some individual farm sites do have up to 10 nymphs per trap. In general there is a 3:1 ratio of nymphs to adults in the traps, but only a few adults being seen in the trees. Because of the strong movement of this insect, and its ability to lay eggs and damage fruit in a short period of time, growers should continue to use BMSB effective materials and use border applications when possible. Bifenthrin (Brigade, Bifenture) was registered in NJ late last week. This is the best material available for BMSB, but repeated applications can only be used 30 days apart. There is a 14 day PHI.

### Peach

**Oriental Fruit Moth (OFM):** Timings for third brood OFM applications are updated as follows:

Third Brood OFM Timing Dates				
County/Region	Degree Days by 8/6 base 45	Insecticide Type		
		Conventional	Intrepid / IGRs	Diamides
Gloucester – Southern	2728	1 <sup>st</sup> – past 2 <sup>nd</sup> –past	1 <sup>st</sup> – past 2 <sup>nd</sup> –past	1 <sup>st</sup> – past 2 <sup>nd</sup> –past
Hunterdon – Northern	2454	1 <sup>st</sup> – past 2 <sup>nd</sup> – 8/6-8/8	1 <sup>st</sup> – past 2 <sup>nd</sup> – 8/4-8/8/6	1 <sup>st</sup> – past 2 <sup>nd</sup> – 8/3-8/6

We do not use degree day modeling for the 4<sup>th</sup> generation when it is present. We do use a treatment or action threshold of 5-8 moths per trap during the 4<sup>th</sup> flight. Adult trap captures should start to increase by next week in southern counties, and shortly thereafter in northern counties. The repeated sprays that are targeting BMSB should also control OFM.

**Tufted Apple Budmoth (TABM):** Timings for second generation TABM control are outlined below. Trap captures are very low at the present time, but most of these insects are in the larval stage so there is very little flight.

	Conventional, Diamides	Conventional, Diamides	Intrepid, Rimon	Bt
County Area	AM – 4 middles	EM – 2 completes	EM – 2 completes	EM – 2 completes
Southern	2 <sup>nd</sup> 8/4-8/5; 3 <sup>rd</sup> 8/10-8/12	2 <sup>nd</sup> – 8/13-8/15	2 <sup>nd</sup> – 8/13-8/15	2 <sup>nd</sup> – 8/10-8/13
Northern	1 <sup>st</sup> 8/8-8/9; 2 <sup>nd</sup> 8/13-16	1 <sup>st</sup> 8/10-8/12	1 <sup>st</sup> 8/12-8/16	1 <sup>st</sup> 8/12-8/16

**Brown Rot:** Rot is appearing in blocks subjected to heavy rainfalls last week. Maintain protection with highly effective materials.

## Apple

**Tufted Apple Budmoth:** See Peach Section above.

**Codling Moth (CM): Codling Moth (CM):** Treatments for 3<sup>rd</sup> brood codling moth should be applied around 8/15 in southern counties and about 1 week later in northern counties. No insecticides are needed now, unless trap counts are exceeding 5 males per trap. Populations in southern counties are generally low at the present time, since we are between generations. Some farms in northern counties still have populations which require treatment.

**Summer Diseases:** Disease pressure is high as long as a wet weather pattern holds. Captan/Topsin combinations or Pristine are preferred summer disease protectants at this time. These protectants should be renewed after 1-2" rain. Pristine should be more rainfast than Captan/Topsin.

## Grape

**Grape Berry Moth (GBM):** Timing for third brood GBM is well past by now. Make sure to check border rows near the woods for GBM infested grapes. If you missed the third brood timing, the next chance for treating grape berry moth will be for the fourth brood around 8/24-26 in southern counties. More on this as we get closer to that timing.

Grape Berry Moth Trap Captures 2013		Grape Root Borer
Date	Average males/trap	Average males/trap
5/25	0	
6/1	2	
6/8	13	
6/15	3	
6/22	0	
6/29	2	0
7/6	6	1
7/13	5	1
7/20	4	4
7/27	2	9
8/3	2	14

## Scouting Calendar

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

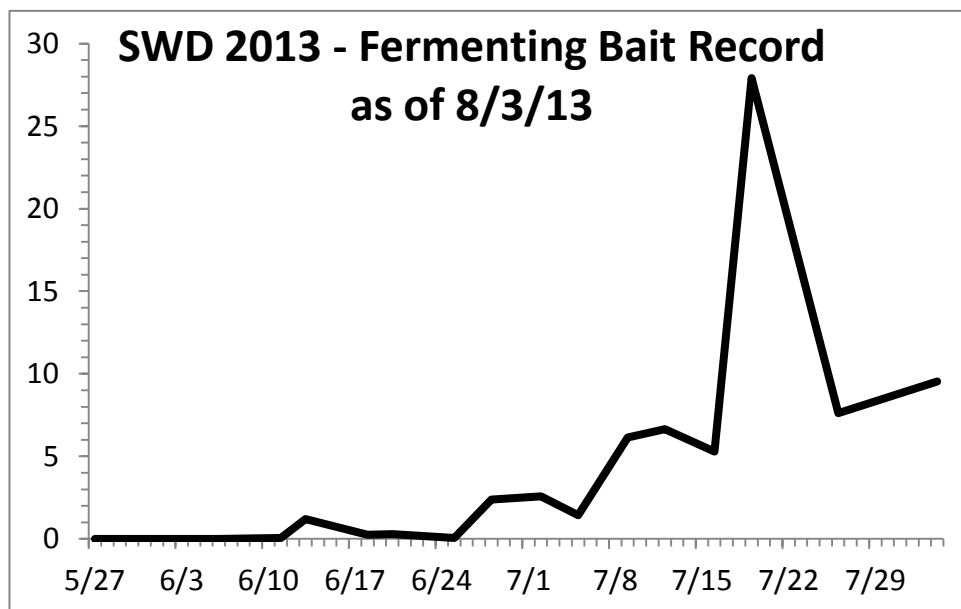
Pest Event or Growth Stage	Approximate Date	2013 Observed Date
Full Bloom Peach (Redhaven)	April 16 +/- 7 Days	April 11
Full Bloom Apple (Red Delicious)	April 20 +/- 9 Days	May 1
Petal Fall (Red Delicious)	April 27 +/- 13 Days	May 9
Shuck Split (Redhaven)	April 29 +/- 7 Days	May 8
Pit Hardening	June 19 +/- 5 Days	June 18

## Blueberry

**Spotted Wing Drosophila (SWD): Trap Captures** – Trap captures increased some since last week. Unharvested fruit is becoming very attractive to SWD adult females.

**Larval Counts** – Samples of unharvested and other “old fruit” left in the fields shows that these fruit are excellent hosts for SWD. Commercially picked late fruit continues to show good quality. All samples from Elliott fields continue to show 0% infested fruit. However, one sample of old Bluecrop from berries left in the field and not being harvested, showed very high numbers of larvae. We have done over 300 salt floatation samples to date on commercial farms.

**After “Harvest” Fields** – If you are no longer picking Bluecrop (or other varieties) fields that still have a substantial amount of fruit in the field, AND you have neighboring fields of late varieties that you are still picking, then it is strongly suggested that you spray the “old fruit fields” and or try to eliminate this fruit. This will decrease the populations in those fields that can still infest fields under harvest.



**Putnam Scale:** Crawler counts have increased since last week. This is the second of 2 generations. Those growers who have Putnam scale populations are advised to treat those fields at this time. Even though getting the sprayer back out is the last thing many growers wish to do at this point in the season, reducing scale populations now will go a long way in reducing bush and fruit infestation next year.

<b>Tree Fruit Trap Counts – Southern Counties</b>									
Week Ending	STLM	TABM_A	CM	AM	OFM-A	DWB	OFM-P	TABM_P	LPTB
4/13					0		0		
4/20	14				5		0		
4/27	0				51		1		
5/4	4	0	0		83		4	0	
5/11	3	1	27		17		2	0	
5/18	5	2	12		28		5	3	28
5/25	1	16	17		23		5	15	38
6/1	1	17	8		30		0	18	12
6/8	1	29	8		1	44	0	37	52
6/15	13	18	7		1	73	0	15	16
6/22	5	8	3		9	35	0	6	24
6/29	13	3	2		0	13	0	3	5
7/6	0	1	1		0	11	0	1	0
7/13	4	1	3		0	4	0	1	12
7/20	7	3	5		12	3	1	3	4
7/27	6	4	5	0	26	3	0	5	1
8/3	6	3	3	0	9	3	0	4	2

<b>Tree Fruit Trap Counts – Northern Counties</b>										
Week Ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OBLR	OFM-P	TABM-P	LPTB
4/13	1									
4/20	2							0		
4/27	71.5		0					1.1		
5/4	74		0					9.3	0	
5/11	87		1.3		29.4			14.1	0	
5/18	41	0	3.9		36			9.4	0	0
5/25	33.2	8.9	6.6		12.2			10.3	5.3	17.5
6/1	16.6	15.1	5		8.6			2.5	20.6	20
6/8	29.3	40.4	6.3		1.2	4.3	2.7	0.5	45.6	27.5
6/15	43.3	46.3	1.6		0.2	1.5	5	0.2	59.4	22.4
6/22	57.7	41.9	1.8		0.2	1.7	1.7	0.8	39	12.8
6/29	58.9	25.3	1.7		1.4	1.7	2	2.4	26	11.4
7/6	85.4	12.7	0.6		1.1	3.3	2.7	4.3	9.8	8.5
7/13	41.6	4.2	1.1		4.5	13	0	2	2.4	7.2
7/20	18.7	1.6	2.1	0	1.2	7.7	0	0.8	1.1	6.9
7/27	74.7	3.2	6.3	0	2	1	0.7	1.5	1.7	2.9
8/3	78.3	3.3	8.1	0	2.2	3	0.3	1.7	2.9	4.1

<b>Blueberry Insect Trap Counts - Atlantic County</b>						
Week Ending	RBLR	CBFW	OBLR	SNLH	Or. Beetle	BBM
4/13	116					
4/20	120					
4/27	100					
5/4	72	0				
5/11	28	0.01				
5/18	12.4	0.15				
5/25	3.1	0.1				
6/1	1.6	0.83				1.6
6/8	4.7	0.89	0	4.5	0	4.7
6/15	58	0.48	7.3	0.3	189	0
6/22	80	0.08	12	0.5	350	0.005
6/29	47	0.005	3.7	0.13	1723	0.006
7/6	54.4	0.004	1.3	0.04	2159	0.1
7/13	25.4	0	0.7	0.43	1966	0.1
7/20	8	0	4.3	0.02	897	0.12
7/27	15.2	0	7.8	0.03	442	0.08
8/2	6.4		1.5	0.05	55	0.05

<b>Blueberry Insect Trap Counts - Burlington County</b>						
Week Ending	RBLR	CBFW	OBLR	SNLH	Or. Beetle	BBM
4/13	71					
4/20	44					
4/27	38					
5/4	26	0				
5/11	9	0				
5/18	1	0.04				
5/25	2	0.13				
6/1	0.2	2.1				
6/8	2.8	1.2	0.33	1	0.07	2.8
6/15	4.8	0.91	8	0.24	26	0
6/22	28.3	0.03	10.3	0.6	231	0
6/29	38.4	0.14	1	0.01	957	0.01
7/6	64.3	0.2	6	0.23	905	0.05
7/13	22.3	0.04	0	0.05	878	0.02
7/20	2	0.15	0	0	330	0
7/27	3.5	0	1	0	141	0.02
8/2	0.5		0	0	11	0.03