

scaffolds

Update on Pest Management
and Crop Development

F R U I T J O U R N A L

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Geneva, NY

HOT SAWS

2010 FRUIT
ARTHROPOD
PEST
REVIEW
(Art Agnello,
Entomology,
Geneva)



❖❖ It's difficult to try characterizing this year's insect season without falling into any of a number of tired clichés, as we seem to have run the gamut of extremes in terms of earliness, heat, rain, drought, you name it. These all came with their own impact on local arthropod populations, so there's really nothing that should have surprised us. Having spent more than a few growing seasons below the Mason-Dixon line, I'm tempted to just say that this year we evidently borrowed some weather patterns from more southern climes (in contrast to 2009, when they seemed to come more from eastern Europe; the northern part).

The season wasted no time showing who was boss by the start of April, when we quickly vaulted into a most un-New York-like spring, with record early occurrences of pink, bloom, and eventually petal fall in apples. A chill briefly stalled things during May (including a late frost around Mothers Day that killed a painful number of fruit buds of selected varieties in localized orchards), before the next heat wave kicked in by June and has hardly abated since. Judging by the degree day numbers, we were never less than 100 DD ahead of the historical "normal" readings on a given date, and frequently as much as 200–300 (or more). Moreover, the rain events seem to have been plentiful and generous in western NY, but

scarce and stingy in the eastern half. Still, there were apparently few real pest crises, although most growers were kept hopping and sufficiently challenged throughout the season.

The early heat threatened to make this a banner year for plum curculio and European apple sawfly, who no doubt relished the opportunity to arrive in the orchard by mid-April and then hung around to ply their craft as the post-petal fall temperatures dipped. However, most growers were able to deal with them with few problems. Flights of oriental fruit moth and codling moth similarly started ahead of schedule, but then staggered a bit during their first generation; summer flight numbers were apparently normal. Obliquebanded leafroller, which was mostly a no-show last year, staged an early and substantial resurgence that translated into a more typical level of fruit damage in historically high-pressure sites.

High temps combined with adequate moisture in many area orchards to support flush foliar growth favoring populations of European red mite as well as green aphids, and potato leafhopper once again seemed to arrive in several installments. More than one report indicated that some of the older miticides are losing their edge, and control of difficult pests such as woolly apple aphid, stink bugs and San Jose scale remain a challenge. Weather no doubt was a factor also in the emergence patterns of apple maggot, which posted some healthy trap numbers in various regions of the state.

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It's becoming more commonplace to find seldom-seen faces in the crowd these days, and this season saw outbreaks of species like apple mealy-bug, white prunicola scale, and assorted stink bugs, including our first orchard detection of brown marmorated stink bug (found on a vehicle in Chazy, which had just driven from Washington Co., so it's anyone's guess where acquisition occurred.)

And, for what it's worth, the California darkling beetle that helped us greet this season (see Scaffolds Issue No. 1, Mar. 22, 2010) is still hanging in there (Fig. 1). ❖❖



Fig. 1. Visiting California tenebrionid, still kicking.

STICK AROUND

TANGLEFOOT TOLL
(Art Agnello & Dave Kain,
Entomology, Geneva)

❖❖ With this issue, Scaffolds ceases publication for the season; we anticipate starting up again next March. In February, as usual, we'll send out an email to all current subscribers to set up next year's mailing list. Our thanks to all of you who have sent comments, suggestions, and articles our way, a practice we hope you'll continue. As a wrap-up, here's our annual summary of the year's pheromone trap results and an Index of Volume 19, 2010 of Scaffolds Fruit Journal.

KEY = GFW - Green Fruitworm; RBLR - Redbanded Leafroller; STLM - Spotted Tentiform Leafminer; OFM - Oriental Fruit Moth (in apples); LAW - Lesser Appleworm; CM - Codling Moth; SJS - San Jose Scale; APB - American Plum Borer (in cherries); LPTB - Lesser Peachtree Borer (in cherries); PL - Pandemis Leafroller; OBLR - Obliquebanded Leafroller; PTB - Peachtree Borer; AM - Apple Maggot; * - first catch of the generation

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Geneva Pest Trapping Results - Avg/Trap/Day

DATE	GFW	RBLR	STLM	OFM	LAW	APB	LPTB	SJS	CM	PL	OBLR	PTB	AM
4/5	0.1*	1.5*	0.0	0.0									
4/8	0.2	7.8	0.5*	0.0									
4/12	0.3	6.8	0.1	0.0									
4/16	0.1	10.3	2.9	0.6*									
4/19	0.2	1.2	0.2	0.3									
4/22	0.0	4.5	3.0	8.5									
4/26	0.0	3.0	8.8	0.9	0.0								
4/29		0.3	1.2	0.5	0.0								
5/3		4.0	24.0	5.0	0.0	0.4*							
5/6		3.8	6.5	3.5	0.0	0.2	0.2*	0.0	0.2*				
5/10		–	0.9	0.0	0.0	0.0	0.0	–	0.0				
5/17		0.8	0.6	0.9	0.0	0.0	0.0	0.6*	0.0				
5/20		–	0.8	8.7	0.0	0.2	0.8	–	0.2				
5/24		0.7	1.1	4.6	0.3*	0.0	0.5	6.6	0.0				
5/28		1.1	0.5	0.5	0.0	0.0	0.8	5.5	0.0	1.1*			
6/1		0.0	0.3	1.3	0.0	0.1	0.0	5.5	0.0	0.3	0.3*		
6/3		0.5	0.0	1.5	0.5	0.0	1.0	5.5	0.0	0.5	0.5		
6/7		0.3	0.3	0.3	0.4	0.4	0.1	1.0	0.0	0.3	0.0		
6/11		0.0	0.7	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	
6/14		0.0	2.5*	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	
6/17		0.0	2.8	0.2	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.3*	0.5*
6/21		0.3*	4.3	0.3	0.1	0.1	0.0	0.0	0.0	0.6	0.0	0.4	0.3
6/24		0.5	3.3	1.0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5

Geneva Pest Trapping Results - Avg/Trap/Day

DATE	RBLR	STLM	OFM	LAW	APB	LPTB	SJS	PL	OBLR	PTB	AM
6/28	0.1	3.9	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.3	1.9
7/1	0.0	10.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.5
7/6	0.0	36.5	4.5	0.0	–	0.0	0.0		0.0	0.1	3.6
7/8	0.5	43.0	0.5	0.0	0.0	0.0	0.0		0.0	1.0	5.0
7/12	0.3	14.5	1.6	0.0	0.1	0.0	1.4*		0.0	0.1	4.5
7/15	0.3	–	–	–	0.0	0.0	3.0		0.0	0.0	7.8
7/19	0.1	11.2	2.6	0.2	0.1	0.1	8.1		0.0	0.1	10.4
7/22	0.2	8.0	5.0	0.0	0.2	0.0	4.8		0.0	0.0	9.7
7/26	0.0	8.1	3.1	0.1	0.0	0.0	8.4		0.0	0.0	17.5
7/29	0.2	11.8	4.3	0.5	0.0	0.0	6.8			0.2	11.5
8/2	0.0	15.5	3.4	0.3	0.3	0.0	1.0			0.0	7.4
8/5	0.0	21.3	2.7	0.0	0.2	0.0	3.7			0.0	3.7
8/9	0.0	14.1	2.0	0.0	0.0	0.0	0.5			0.0	2.8
8/12	0.0	15.0	1.2	0.0	0.7	0.0	1.0			0.0	1.5
8/16	0.1	14.8	2.6	0.0	0.3	0.0	0.5			0.0	2.1
8/20	0.4	6.3	1.0	0.0	0.0	0.0	2.0			0.0	0.4
8/23	0.2	5.8	0.7	0.0	0.0	0.0	1.8			0.0	0.7
8/26	0.2	3.8	0.8	0.0	0.0	0.0	3.3				1.3
8/30	0.0	4.1	0.1	0.0	0.0	0.0	1.1				0.8

Hudson Valley (Highland) Pest Trapping Results - Avg/Trap/Day

DATE	GFW	RBLR	STLM	OFM	LAW	CM	OBLR	AM
3/19	0.1*							
3/22	0.8	0.1*	0.1*					
3/29	0.1	0.0	0.1	0.1*				
4/5	0.0	4.1	2.4	0.1				
4/12	0.1	71.6	9.1	1.2				
4/20		11.4	68.2	3.6				
4/26		10.6	72.8	13.6				
5/3		4.6	57.2	9.5				
5/10		1.7	24.0	0.1	0.6*	2.0*		
5/17		0.6	5.5	0.6	0.5	4.6		
5/24		0.4	2.6	0.9	0.5	3.2		
6/1		0.0	25.0*	10.0*	0.4	1.6		
6/7		0.1	46.8	0.0	0.5	0.7		
6/14		0.0	28.1	0.0	0.5	0.3	4.4*	
6/21		0.0	105.0	1.6	2.6	0.4	8.9	
6/28		1.9*	123.3	1.8	1.1	0.0	5.4	2.8*
7/6		2.1	63.8	3.1	1.8	1.5	1.8	0.1
7/12		1.0	36.8	3.6	1.7	1.6	0.7	0.5
7/19		1.0	29.9	2.9	1.1	2.2	0.9	0.5
7/26		1.3	13.1	4.7	1.9	4.4	0.7	0.7
8/2		0.0	14.6	0.5	1.4	1.2	1.5*	0.6
8/9		0.7	41.1	3.1	1.4	2.9	3.0	0.6
8/23		1.1	15.4	7.8	0.3	1.6	1.8	0.2
8/30		2.4	7.9	6.3	0.5	0.9	0.2	0.2



Brown marmorated stink bug

SCAFFOLDS Fruit Journal

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