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Update on Pest Management
and Crop Development

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

July 18, 2005

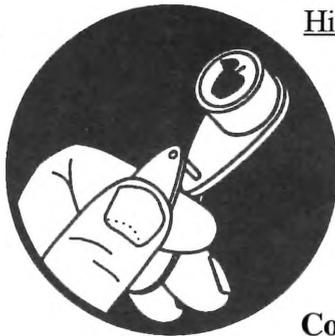
VOLUME 14, No. 18

Geneva, NY

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LINE
OF
SIGHT

ORCHARD
RADAR
DIGEST



Highland Predictions:

Roundheaded Appletree Borer

Peak hatch roughly: July 8 to July 25.

Dogwood Borer

Peak hatch roughly: July 28.

Codling Moth

Codling moth development as of July 18: 2nd generation adult emergence at 13% and 2nd generation egg hatch at 1%.

2nd generation 7% CM egg hatch: July 24 (= target date for first spray where multiple sprays needed to control 2nd generation CM).

Obliquebanded Leafroller

[NEWA Apple Pest DD calculations: Estimated date of OLB 1st summer generation 100% egg hatch: July 14.]

Spotted Tentiform Leafminer

Second optimized sample date for 2nd generation STLM sapfeeding mines, if needed: July 14. Third optimized sample date for 2nd generation STLM sapfeeding mines, if needed: July 23



Geneva Predictions:

Roundheaded Appletree Borer

Peak hatch roughly: July 9 to July 25.

Dogwood Borer

Peak hatch roughly: July 29.

Codling Moth

Codling moth development as of July 18: 2nd generation adult emergence at 3% and 1st generation egg hatch at 99%.

Obliquebanded Leafroller

[NEWA Apple Pest DD calculations: Estimated date of OLB 1st summer generation 100% egg hatch: July 19.]

Oriental Fruit Moth

[NEWA Apple Pest DD calculations: OFM 2nd summer generation estimated egg hatch as of July 18 = 50%.]

Spotted Tentiform Leafminer

Optimum first sample date for 2nd generation STLM sapfeeding mines:

July 12.

Second optimized sample date for 2nd generation STLM sapfeeding mines, if needed: July 18.

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- ◆ Midsummer insect pest concerns

PEST FOCUS

TRAP CATCHES

UPCOMING PEST EVENTS

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INSECT BITES

HOT WINGS
(Art Agnello, Entomology,
Geneva)

Our Fill of Psylla

❖❖ Reports of problem pear psylla populations are common around the state. This perennial menace continues to be one of the most difficult insect pests to deal with in any of the fruit crops, mainly because of its tendency to quickly develop tolerance or resistance to insecticides to which it's exposed, irrespective of their mode of action.

The problem with psylla in general is that, once they develop resistance to a material (or sometimes a class of materials, like pyrethroids), it's relatively "stable" — or in other words, avoiding that a.i. for a period of time usually doesn't result in their becoming susceptible again. Most NY populations developed at least tolerance if not resistance to Mitac years ago, so I don't hold out a lot of hope that this material will give good results in most cases. The same thing applies to pyrethroids — depending on field history, many populations started to become problematic in response to programs that used products like Asana (or Pydrin), Ambush or Pounce as early season (white bud) strategies in combination with prebloom oil, and when newer pyrethroids became available, it was a gamble whether they would respond; often they didn't.

According to efficacy trials conducted in other pear regions such as Oregon, Michigan and Pennsylvania, Assail and Actara probably offer some of the best potential activity against psylla for the time being; however, these products are admittedly more expensive and harder to justify given the current slow pear market. This is a difficult problem because we don't have many alternatives, inexpensive or otherwise, but for growers who are intent on going the "alternatives" route, I'm obliged to restate my misgivings here about insecticidal soap (M-

Pede). It does work against any psylla that it hits, but doesn't have any residual activity, and there have been phytotoxicity and fruit marking issues with this option in the past, along with its relatively high cost. I'd rather advise weekly sprays of a summer oil at 1–2%, at least as a 'war of attrition' approach (this has worked better in my field trials when started earlier, before threshold numbers are reached), but 3–4 applications will definitely reduce numbers of eggs and nymphs.

Apple Maggot

Trap catches in the Hudson Valley already began reaching threshold a couple of weeks ago, and those in western NY started out with some impressive numbers last week, so the indication is this will be a high population season around the state. If you aren't monitoring in specific orchards and haven't yet applied a protective spray against AM (and aren't using SpinTor for OBLR), prudence would suggest some attention to this pest. Hanging a few volatile-baited sphere

continued...

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traps on the edge of susceptible plantings can provide a world of insight on when (and whether) immigrating flies are posing a threat. Growers on a SpinTor program should be somewhere between the first and second spray of this material for leafrollers, which will provide protection against moderate AM pressure. For those not using OP cover sprays, Assail provides excellent control of apple maggot as well as internal leps.

Western Flower Thrips

This formerly rare pest has been a recent cause of damage to nectarines and peaches in the Hudson Valley. Originally limited to western North America, this is now a cosmopolitan species that is a key pest in the greenhouse production of flowers and vegetables. Apparently, drought conditions and high temperatures encourage damaging populations that can affect stone fruit crops, particularly nectarines and peaches. The following information is taken from the PA Tree Fruit Production Guide: "...just prior to and during harvest,...adults move from alternate weed or crop hosts to fruit. [They] feed on the fruit surface in protected sites, such as in the stem end, the suture, under leaves and branches, and between fruit. Feeding ...results in silver stipling or

patches. Silvering injury is particularly obvious on highly colored varieties. Because Lannate has a short preharvest interval (4 days), it can be used to control thrips during harvest." Also, SpinTor can be used within 14 days of harvest. An application after the first harvest may prevent subsequent losses; however, an additional application may be needed if thrips pressure is severe.

Mites

Lots of eggs are present on the foliage right now, and with our sultry temperatures, the period from egg deposit to hatch and multiply is a very short one. A number of orchards we have seen are in trouble from European red mites so far, but also keep in mind the potential for two-spotted mite, which can reach alarming levels in a hurry. Inspect your leaves using the 5 mite/leaf form on p. 73 of the Recommends, and be aware that two-spot populations increase more quickly than ERM, so be conservative in your interpretations. Zeal is a good new option to keep in mind if treatment is needed; Acramite tends to be more effective against TSSM than ERM, and Nexter works better against red mites than it does on two-spots, but the main advice is to get out there and look at your foliage.❖❖

INSECT TRAP CATCHES (Number/Trap/Day)

	Geneva, NY			Highland, NY		
	7/11	7/14	7/18	7/11	7/18	
Redbanded leafroller	3.2	2.0	1.4	Redbanded leafroller	3.2	2.8
Spotted tentiform leafminer	18.2	33.8	7.3	Spotted tentiform leafminer	87.6	71.9
Oriental fruit moth	0.0	0.0	0.1*	Oriental fruit moth	0.6	0.9
Lesser appleworm	0.0	0.0	0.4*	Lesser appleworm	0.5	0.4
San Jose scale	0.0	0.0	33.8*	Codling moth	0.2	0.3
Codling moth	0.0	0.0	0.0	Obliquebanded leafroller	2.3	0.4
American plum borer	1.0	0.2	0.4	Apple maggot	0.1	0.1
Lesser peachtree borer	1.7	0.7	0.3			
Peachtree borer	0.2	0.0	0.0			
Obliquebanded leafroller	2.0	0.7	0.0			
Apple maggot	0.0	0.0	0.0			
* first catch						

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PEST FOCUS

Geneva: **San Jose scale** 2nd flight beginning. **American plum borer** 2nd flight beginning. Degree days (base 43°F) since **spotted tentiform leafminer** 2nd flight began (6/23) = 800

Highland:

San Jose scale black cap stage present on shoots and fruit. Degree days (base 50°F) since first **codling moth** trap catch = 1166. Degree days (base 45°F) since first **oriental fruit moth** trap catch = 1543.

UPCOMING PEST EVENTS

	43°F	50°F
Current DD accumulations (Geneva 1/1-7/18):	1953	1313
(Geneva 1/1-7/18/2004):	1852	1166
(Geneva "Normal"):	1843	1222
(Geneva 7/25 Predicted):	2174	1486
(Highland 1/1-7/18):	2119	1453

Coming Events:	Ranges(Normal± StDev):	
Apple maggot 1st oviposition punctures	1528-2078	1021-1495
Codling moth 2nd flight begins	1555-2283	999-1529
STLM 2nd gen. tissue feeders present	1378-2035	913-1182
Spotted tentiform leafminer 2nd flight subsides	2006-2394	1321-1673
Comstock mealybug 1st flight subsides	1818-2132	1216-1418
Redbanded leafroller 2nd flight peak	1517-2025	959-1357
Obliquebanded leafroller 1st flight subsides	1613-2131	1034-1434
Oriental fruit moth 2nd flight peak	1378-2086	865-1415
American plum borer 2nd flight peak	1953-2415	1305-1677

NOTE: Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are possible. These recommendations are not a substitute for pesticide labelling. Please read the label before applying any pesticide.

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