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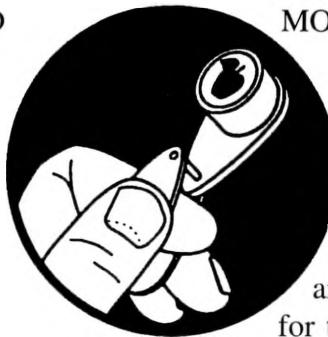
F R U I T J O U R N A L

Update on Pest Management
and Crop Development

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AUGUST ASPECT

ORCHARD
RADAR
DIGEST



MODEL BUILDING

Oriental Fruit Moth. This pest's development is tracked using a 45°F DD model from biofix, defined as the first sustained moth catch of the first brood. We are currently in the control window for the second brood, which started about June 30 in WNY. Pesticides to control this brood should have been applied starting at 1450–1500 DD after biofix, and followed up on a 10–14-day interval if trap numbers exceeded 10 moths/trap/week. Many blocks with a history of OFM pressure would be due for a follow-up application this week. Our sample numbers as of today:

Geneva (biofix 5/7) - 1882

Albion (biofix 5/4) - 1822

Appleton (biofix 4/30) - 1860

Williamson (biofix 5/3) - 1892

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Geneva Predictions:

Dogwood Borer

Peak egg hatch: August 7.

Codling Moth

Codling moth development as of August 9: 2nd generation adult emergence at 39% and 2nd generation egg hatch at 8%.

2nd generation 7% CM egg hatch: August 8 (= target date for first spray where multiple sprays needed to control 2nd generation CM). 2nd generation 30% CM egg hatch: August 20 (= single spray date where one spray needed to control 2nd generation codling moth).

White Apple Leafhopper

2nd generation WAL found on apple foliage: August 14.

Highland Predictions:

Codling Moth

Codling moth development as of August 9: 2nd generation adult emergence at 85% and 2nd generation egg hatch at 53%.

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- ❖ Orchard Radar Digest
- ❖ Insect model update
- ❖ Late season insects of note

UPCOMING PEST EVENTS

INSECT TRAP CATCHES

Codling Moth. We are currently approaching the second brood control window for this pest, and considerably further along in the Hudson Valley. With 1260 DD (base 50°F) from the 1st catch of the season as a first spray date for the second brood, we currently have:

Geneva (biofix May 17) - 1275
Albion (biofix May 17) - 1232
Williamson (biofix May 18) - 1204
Highland (biofix May 10) - 1731

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MOVE OVER, ROVER

(WET) DOG DAYS
(Art Agnello, Entomology,
Geneva)

❖❖ Most of the season's pest control decisions will probably be completed this week, and as growers prepare to make what will likely be their final run through the orchard for crop protection purposes before turning their attention to harvest activities, we are once again looking back at a season where many traditional insect pests have either failed to be a big concern, or else were just as obstructed by unfavorable weather as everything else was, and conventional wisdom is probably out someplace looking for a familiar face. At any rate, for want of any good arguments to the contrary, here's a quick rundown of some of the more important players to keep in mind for these dog day duties.

Apple Maggot

Catches of adults have been curiously variable around the state — quite low but steady in WNY, and often very high in the Hudson Valley, so this reinforces the value of block-specific monitoring for spray decisions. Mid-August is traditionally still fair game for a decent number of flies to be out and laying eggs, although numbers would normally

begin tapering off soon. This is yet another of those seasons when localized trapping can pay off in the event that some blocks are under greater pressure than others, even on the same farm, so please continue to monitor traps in representative blocks.

Internal Lepidoptera

This group has become our perennial wild-card puzzler since making such a big splash in 2002. Last year, which was notably similar to this season, the later broods of oriental fruit moth and/or codling moth failed to make much of a showing, which was a welcome situation. Not content to assume the best scenario, however, we have attempted to keep close tabs on adult catches and larval infestations once again this summer, but things are still fairly quiet as best as we can tell. Trap counts for the 2nd flight of oriental fruit moth have tapered off from their moderate July levels, and we have yet to see whether the 3rd brood will make its presence felt in the western orchards (both apple and peach). In our eastern demonstration blocks (Champlain

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Valley, Capital District, and Hudson Valley), the same scenario applies with regard to lesser appleworm, which is the primary pest. Pheromone disruption results have been encouraging so far, but the edges of disrupted blocks are always susceptible to some problematic fruit infestations. For now, we're recommending that problem sites be kept covered with at least another spray, and we'll see what the tail end of the pre-harvest period looks like. Options include Guthion or Imidan or Asana in peaches. In apples and pears, you can use Guthion, Imidan, Assail, Avaunt, Warrior or Danitol; the non-OP materials will additionally give control of white apple leafhopper. For control of OFM, alternate row middle applications will not be as effective as whole orchard sprays in high pressure blocks. Assess the pressure in your specific situations, check the pre-harvest intervals, and determine whether a full or border spray might be in order.

European Corn Borer

Recall that these moths have a final flight that extends to the middle of September, and that the offspring can inflict last-minute fruit feeding damage to later varieties. One or two late sprays of a B.t. product like Dipel can go a long ways toward minimizing this injury, and the 0-day PHI is compatible with any harvest schedule. Also, SpinTor applied against late season leafrollers will provide incidental corn borer control (PHI = 7 days).♦♦

INSECT TRAP CATCHES (Number/Trap/Day)

Geneva, NY

Highland, NY

	<u>8/2</u>	<u>8/5</u>	<u>8/9</u>		<u>8/2</u>	<u>8/9</u>
Redbanded leafroller	0.9	0.3	0.4	Redbanded leafroller	0.1	0.2
Spotted tentiform leafminer	21.1	11.8	7.5	Spotted tentiform leafminer	29.6	16.6
Oriental fruit moth	0.8	0.0	0.4	Oriental fruit moth	0.4	0.2
Lesser appleworm	0.0	0.2	0.0	Codling moth	0.4	0.2
Codling moth	0.3	0.0	0.0	Lesser appleworm	2.0	1.2
San Jose scale	0.0	0.0	0.0	Obliquebanded leafroller	0.1	0.1
Obliquebanded leafroller	0.1*	0.0	0.4	Sparganothis fruitworm	0.2	0.2
American plum borer	1.0	2.7	1.8	Tufted apple bud moth	0.0	0.0
Lesser peachtree borer	0.6	3.3	0.1	Variegated leafroller	0.2	0.2
Peachtree borer	3.0	3.7	1.3	Apple maggot	0.3	0.3
Apple maggot	0.1	0.7	0.3			
Dogwood borer	0.3	0.0	0.0			

* first catch

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UPCOMING PEST EVENTS

	<u>43°F</u>	<u>50°F</u>
Current DD accumulations (Geneva 1/1–8/9):	2398	1558
(Geneva 1/1–8/9/2003):	2310	1519
(Geneva "Normal"):	2441	1693
(Geneva 8/16 Predicted):	2578	1689
(Highland 1/1–8/9):	2890	2012

Coming Events:

	Ranges:
Comstock mealybug 2nd gen. crawlers peak	2380–2624 1505–1781
Apple maggot flight peak	2139–2587 1458–1770
Oriental fruit moth 3rd flight begins	2342–2756 1613–1901
San Jose scale 2nd flight peak	2136–2560 1459–1805
Spotted tentiform leafminer 3rd flight begins	2288–2644 1532–1872
Codling moth 2nd flight peak	2005–2835 1337–1977

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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