# scaffolds

Update on Pest Management and Crop Development

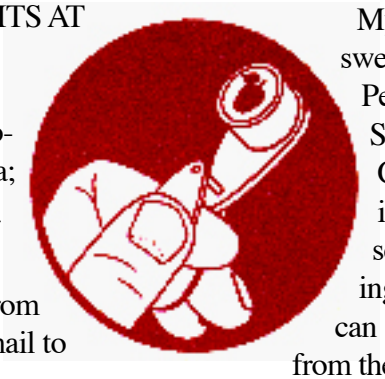
F R U I T J O U R N A L

August 7, 2017 VOLUME 26, No. 20 Geneva, NY


INSECTS

## SPOTTED WING SPOTTED


STONE FRUITS AT RISK (Julie Carroll, NYS IPM Program, Geneva; jec3@cornell.edu)

[The following is an excerpt from Julie Carroll's August 3, 2017 e-mail to her SWD cooperaters]

❖❖ The trap network has caught SWD at every site. The Herkimer County site was the only place without a trap catch, but this week that changed and the grower found SWD in the blueberries, as well, and shut down the planting.

It's discouraging to hear from so many blueberry growers this year who are shutting down their u-pick and direct market operations. A grower with an insecticide program in place reported this week of firm, not quite ripe blueberries with SWD larvae in them. I can only imagine things are extremely challenging in fall raspberries and blackberries.

As occurred in Michigan a couple years ago, a disaster is brewing in tart cherries in NY. One grower in Wayne County called me this morning. He had to dump 70 tanks of tart cherries, which the processor rejected due to larvae and rot. There is zero tolerance for larvae and rot in processing fruit. Two consultants have confirmed SWD in tart cherries in Wayne County. Because tart cherries are put into water tanks for delivery to the processor, SWD larvae will drown and die within minutes, but if that load is dumped in a cull pile, within a day it becomes a breeding ground for more SWD.

My program has confirmed SWD in sweet cherries in Yates County, as well. Peter Jentsch's program has found SWD in sweet cherries in Dutchess County – an unsprayed orchard in which 2–3 pupal cases could be seen per fruit. (Photos from Washington state showed that SWD pupae can form when larvae are half emerged from the cherry.)

Late season varieties of blueberry, raspberry, as well as peaches and other stone fruit, such as plums, will be at high risk of infestation this year as populations of SWD will continue to climb across NY. Increased brown rot (*Monilinia*) infections in stone fruit have been attributed to SWD infestation, but I am not certain research has verified this. We know that sour rot in grapes is associated with *Drosophila*, including *D. suzukii* (SWD). SWD infestations were documented by my lab in 'Marquette' and 'Leon Millot' from Clinton County last year.

Growers are asking about treating cull piles and drops on the ground to reduce population

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## IN THIS ISSUE…

buildup of SWD, because peaches are just starting to be harvested and harvests will run through mid-September. There are a few insecticides that can be used for drops and cull piles against SWD and *Drosophila* spp. For tree fruits at post-harvest and on the orchard floor, the primary option is Asana XL, which has a 2(ee) registration for this use, and is rated 'good to excellent'. Malathion 5EC, which is rated 'good', can be used on and around cull piles.

My traps in the hummingbird research block are catching hundreds of SWD. In total last week, the 36 traps caught 1655 SWD in the ~1 acre unsprayed raspberry planting and 72 fruit sampled yielded 59 eggs and 572 larvae via salt flotation. Trapping at this point in time is less useful than sampling fruit for infestation – leaking fruit, dimpled fruit, and salt flotation to check for larvae. Although, if the grower has an insecticide program in place, trapping can give some indication of the level of control being achieved.

Maintaining insecticide coverage to protect fruit will be essential to protecting fruit from infestation and refrigerating fruit in the market will also be essential. I want to thank you all for your efforts this year. It seems it has been a perfect storm for SWD. Early arrival; warm, cloudy, and wet weather; heavy rains washing off insecticides; slow-to-ripen fruit. ❖❖

## EYE ON THE BALL

### APPLE MAGGOTS RISING

(Art Agnello, Entomology, Geneva; ama4@cornell.edu)

❖❖ Just a reminder that the past week saw a sharp increase in our apple maggot trap captures in at least one site in Wayne Co., indicating that we are now in the midst of peak flight, at least in western NY, so if your blocks have not received a preventive spray against this pest in the last 10 days, this week would be optimal timing to ensure that the fruits are protected until the population pressure abates at the end of the month. ❖❖

ORCHARD RADAR DIGEST
[H = Highland; G = Geneva]:

**Codling Moth**
Codling moth development as of August 7:
2nd generation adult emergence at 87% (H)/ 56% (G) and 2nd generation egg hatch at 56% (H)/18% (G).

**White Apple Leafhopper**
2nd generation WALH found on apple foliage: August 8 (G).

scaffolds
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GENERAL INFO

**EVENT ANNOUNCEMENT**

CORNELL FRUIT PEST CONTROL FIELD DAYS

The N.Y. Fruit Pest Control Field Days will take place during Labor Day week on Sept. 7-8 this year, with the Geneva portion taking place on Thursday Sept. 7, and the Hudson Valley installment on the second day, Friday, Sept. 8 (yes, that's a day later in the week than we usually hold it, but we've decided to push it back to accommodate some of our presenters' teaching schedules). Activities will commence in Geneva on the 7th, with registration, coffee, etc., in the lobby of Barton Lab at 8:30 am. The tour will proceed to the orchards to view plots and preliminary data from field trials involving new fungicides, bactericides, miticides, and insecticides on tree fruits and grapes. It is anticipated that the tour of field plots will be completed before noon. On the 8th, participants will register at the Hudson Valley Laboratory starting at 8:30, after which they will view and discuss results from field trials on apples and other fruit crops. No pre-registration is required for either event. ❖❖

SUMMER BREAK

*Scaffolds* will not be published on **August 14**, as the editor will be on vacation. The next regular issue will be **August 21**.

GROUP OF FRUIT PICKERS IN THE BALDWIN ORCHARD OF FOSTER UDELL, BROCKPORT, MONROE COUNTY, N. Y.

## INSECT TRAP CATCHES (Number/Trap)

### Geneva, NY

| | 7/31 | 8/4 | 8/7 |
|---|---|---|---|
| Redbanded leafroller | 1.5 | 1.0 | 1.5 |
| Spotted tentiform leafminer | 109.5 | 115.0 | 126.5 |
| Oriental fruit moth | 2.0 | 4.5 | 19.5 |
| Codling moth | 8.0 | 37.5 | 24.5 |
| Lesser peachtree borer | 23.5 | 14.5 | 11.5 |
| Peachtree borer | 0.0 | 10.0 | 5.0 |
| Dogwood borer | 2.0 | 0.0 | 0.0 |
| Obliquebanded leafroller | 3.0 | 1.5 | 2.5 |
| Apple Maggot | 0.0 | 2.7 | 1.3 |

### Highland, NY

| | 7/24 | 7/31 | 8/7 |
|---|---|---|---|
| Redbanded leafroller | 11.5 | 14.5 | 10.0 |
| Spotted tentiform leafminer | 180.5 | 188.0 | 198.5 |
| Oriental fruit moth | 6.5 | 6.5 | 2.5 |
| Lesser appleworm | 14.5 | 12.5 | 13.0 |
| Obliquebanded leafroller | 1.5 | 6.0 | 3.5 |
| Codling moth | 16.5 | 42.5 | 16.5 |
| San Jose scale | 1597 | 598.0 | 227.0 |
| Sparganothis fruitworm | 1.0 | 1.0 | 1.0 |
| Variegated leafroller | 1.5 | 0.0 | 2.0 |
| Tufted Apple Bud Moth | 1.5 | 2.5 | 0.0 |
| Dogwood Borer | 24.5 | 16.0 | 29.5 |
| Apple Maggot | 3.3 | 2.8 | 1.5 |

## UPCOMING PEST EVENTS

| | | 43°F | 50°F |
|---|---|---|---|
| Current DD* | (Geneva 1/1–8/7/17): | 2381.9 | 1518.6 |
| accumulations | (Geneva 1/1–8/7/16): | 2494.3 | 1709.8 |
| | (Geneva "Normal"): | 2485.8 | 1698.1 |
| | (Geneva 1/1-8/14, predicted): | 2567.4 | 1655.1 |
| | (Highland 1/1–8/7/17): | 2874.0 | 1983.0 |

| Coming Events: | Ranges (Normal ±StdDev): | |
|---|---|---|
| American plum borer 2nd flight peak | 2005-2575 | 1351-1777 |
| Apple maggot flight peak | 2118-2638 | 1420-1824 |
| Codling moth 2nd flight peak | 1948-2693 | 1298-1863 |
| Comstock mealybug 2nd gen crawlers peak | 2380-2624 | 1658-1737 |
| Lesser appleworm 2nd flight peak | 2144-3071 | 1433-2129 |
| Obliquebanded leafroller 2nd flight start | 2235-2634 | 1505-1821 |
| Oriental fruit moth 3rd flight start | 2263-2821 | 1531-1958 |
| Redbanded leafroller 3rd flight start | 2523-2959 | 1718-2055 |
| Spotted tent. leafminer 3rd gen flight peak | 2561-3002 | 1743-2093 |
| White apple LH 1st brood adults subside | 2195-2521 | 1564-1792 |

*all DDs Baskerville-Emin, B.E.

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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