

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

WET
DOG
DAYS

BEYOND THE CLOUDS

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❖❖ Most of the season's major arthropod pest control decisions are likely to be completed during the next couple of weeks. As you prepare to make what may be your final passes through the orchard for crop protection purposes before starting to concentrate on harvest activities, try to keep alert to any late-breaking pest developments that might conceivably round out the summer. As in most years, forecast weather trends appear to be more of what we've been having in terms of rain (pretty much daily) and heat (not so much), which will have their specific impacts on insect activity, depending on the species. Here's a quick rundown of some of the more important late July-August pests to keep in mind during this homestretch.

Apple Maggot

Adults have just started flying in most areas, but numbers have not been increasing so far in the Wayne Co. orchard sites where we're trapping for them this year. In historically high-pressure orchards, early to mid-August is the most active period for flies to be out and laying eggs. With the regular rains softening the ground and easing the process of emergence for those adults that haven't drowned, we're sure to see further upticks in trap numbers during this period. As always, targeted 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 "problem" blocks. Our best options these days are Imidan, Assail, and to a somewhat lesser degree, Altacor, Avaunt, Delegate, Exirel, certain premixes such as Endigo, Leverage, Voliam Xpress/Besiege, and the pyrethroids.

Internal Lepidoptera

This complex of fruit-feeding larvae continues to pose a threat in several problem sites. The second generation flights are under way, but are still generally at low levels, so it pays to stay on top of the situation in your specific orchard, to be sure you're aware of any signs of fruit damage.

Conditions are predicted to be favorable for respectable August flights, particularly for codling moth, and the 2nd generation egg hatch will be under way in the most advanced areas of the state this week, so we'll soon be in the window for control sprays against the smallest larvae. This will be an appropriate time for management sprays for oriental fruit moth as well, so prudence would dictate a

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critical evaluation of your late-season fruit protection status, to be sure you are adequately covered until the PHI for the various respective varieties.

Recommended options in apples include Altacor, Assail, Belt, Delegate, Exirel, or Voliam Xpress/Besiege. In peaches, you can use Altacor, Assail, Delegate, or Voliam Xpress/Besiege. Pyrethroids and OPs may be less suitable because of locally resistant populations. This is also a suitable time for Cyd-X or Carpovirusine granulosin applications against codling moth, or Madex HP against both OFM and codling moth; these products will help to lower overall population levels over the long term. 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. In sites with more modest pressure, applications of a B.t. product on a 7–10-day schedule helps to maintain populations below an economic level; options include Deliver, Dipel, Biobit, Javelin, and Agree.

Comstock Mealybug

In pears especially, this begins the period of greatest migration of 2nd generation nymphs into the fruit calyx, where they will be concealed until detected as unwelcome surprises during packing-house inspections. In apples, infestations tend to result in blooms of sooty mold, particularly over the bottom half of fruits. Blocks with mealybug "issues" should receive a protective spray of Actara (pears only), Admire Pro (pears only), Assail (apples and pears only), Centaur, Movento, or Portal.

European Corn Borer

These moths have a late flight that extends to the middle of September, and the offspring can inflict last-minute fruit feeding damage to later varieties. Delegate (PHI = 7 days) is a good option for control of European corn borer. Also, one or two

late sprays of a B.t. product can go a long way toward minimizing this injury, and the 0-day PHI is compatible with any harvest schedule.

Mites

Although mites have not been much of an issue so far this season, they are extremely good at exploiting any high temps that may still occur, in order to pop out a few more generations before they hang it up for the winter; twospotted spider mites are also possible, including in stone fruit plantings. A periodic inspection of your foliage can pay big dividends if they happen to build rapidly before the crop is fully mature. The 7.5 mites/leaf threshold (sampling chart on p. 76 in the Recommendations) would be appropriate starting at the beginning of August; we remain at 5.0 mites/leaf until the end of this month.

Obliquebanded Leafroller

The second summer flight of OBLR isn't due to start until the next 1–2 weeks, but the first larvae will be out looking for something to nibble on soon afterwards. If you struggled to manage the 1st summer brood, you might also plan to cast a

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judicious eye on your fruits while you're in there checking the leaves for mites, to determine whether a late application of Altacor, Delegate, Exirel, Proclaim, Rimon or a B.t. material such as Dipel, Deliver or Biobit might be of use in heading off late-season feeding damage.

A couple of reminders...

- Review the comments in the May 22 issue regarding management options for woolly apple aphids, in case their numbers take a sudden jump in the next couple of weeks.

- Japanese beetles are still to be found feeding on apple foliage. An application (or two) of a product such as Assail, Imidan, Sevin, Voliam Xpress or Endigo may be needed to curtail their damage. ❖❖

ORCHARD RADAR DIGEST

[H = Highland; G = Geneva]:

Roundheaded Appletree Borer

RAB peak hatch roughly: July 10-July 30 (G).

Dogwood Borer

Peak DWB egg hatch roughly: July 29 (G).

Codling Moth

Codling moth development as of July 24:
2nd generation adult emergence at 50% (H)/15% (G) and 2nd generation egg hatch at 14% (H)/2% (G).

2nd generation 7% CM egg hatch = target date for first spray where multiple sprays needed to control 2nd generation CM: July 31 (G).

White Apple Leafhopper

2nd generation WALH found on apple foliage: July 28 (H)/ August 7 (G).

| |
|---|
| PEST FOCUS |
| Geneva: Apple Maggot 1st trap catch 7/21. |

EVENT ANNOUNCEMENT

WAYNE COUNTY FRUITGROWER TOUR

Wednesday, August 2, from 9:30 am
Registration and 1st stop at G&G Farms,
6680 Tuckahoe Rd, Williamson, NY
(GPS: N 43.240679, W 77.199981)

Sponsored by agr.assistance, this large, informative and entertaining tour is in its 19th year, and will feature presentations on pre- and postharvest PGR use, apple thinning results, native pollinators, this season's disease control challenges, and tips for establishing new plantings, plus much more. Door prizes, lunch, some comic relief, a BBQ/clambake dinner with a live band, growers and industry representatives from NY and surrounding states — always a great way to spend a midsummer day. Free attendance. Contact Lindsay LaMora (585-734-8904; lindsaylamora@agrassistance.com) for RSVP pre-registration and tour information. ❖❖



GENERAL INFO

continued...

| INSECT TRAP CATCHES (Number/Trap) | | | | | | | | |
|--------------------------------------|-------------|-------------|-------------|-----------------------------|-------------|-------------|-------------|--|
| Geneva, NY | | | | Highland, NY | | | | |
| | <u>7/17</u> | <u>7/21</u> | <u>7/24</u> | | <u>7/10</u> | <u>7/17</u> | <u>7/24</u> | |
| Redbanded leafroller | 6.0 | 1.0 | 0.5 | Redbanded leafroller | 22.0 | 15.5 | 11.5 | |
| Spotted tentiform leafminer | 158.0 | 55.5 | 42.0 | Spotted tentiform leafminer | 271.5 | 193.5 | 180.5 | |
| Oriental fruit moth | 5.5 | 6.5 | 6.0 | Oriental fruit moth | 4.5 | 3.5 | 6.5 | |
| Codling moth | 1.5 | 7.5 | 10.5 | Lesser appleworm | 21.0 | 0.0 | 14.5 | |
| Lesser peachtree borer | 4.0 | 3.5 | 1.5 | Obliquebanded leafroller | 16.5 | 4.5 | 1.5 | |
| Peachtree borer | 4.5 | 1.5 | 1.0 | Codling moth | 2.0 | 10.0* | 16.5 | |
| Dogwood borer | 1.5 | 4.5 | 2.0 | San Jose scale | 0.5* | 53.0 | 1597 | |
| Obliquebanded leafroller | 5.0 | 1.0 | 0.5 | Sparganothis fruitworm | 1.5 | 0.0 | 1.0 | |
| Apple Maggot | 0.0 | 1.0* | 0.0 | Variegated leafroller | 0.0 | 0.0 | 1.5 | |
| | | | | Tufted Apple Bud Moth | 1.5 | 0.0 | 1.5 | |
| | | | | Dogwood Borer | 3.5 | 0.5 | 24.5 | |
| | | | | Apple Maggot | 0.0 | 4.3 | 3.3 | |

* first catch

| UPCOMING PEST EVENTS | | | |
|--|-------------------------------|-------------|-------------|
| | | <u>43°F</u> | <u>50°F</u> |
| Current DD* | (Geneva 1/1-7/17/24): | 2033.4 | 1268.1 |
| accumulations | (Geneva 1/1-7/24/16): | 2070.8 | 1384.3 |
| | (Geneva "Normal"): | 2095.2 | 1404.8 |
| | (Geneva 1/1-7/31, predicted): | 2221.9 | 1407.6 |
| | (Highland 1/1-7/24/17): | 2498.0 | 1685.0 |
| <u>Coming Events: Ranges (Normal ±StdDev):</u> | | | |
| American plum borer 2nd flight peak | | 2005-2575 | 1351-1777 |
| Apple maggot flight peak | | 2118-2638 | 1420-1824 |
| Codling moth 2nd flight starts | | 1775-2234 | 1028-1499 |
| Codling moth 2nd flight peak | | 1948-2693 | 1298-1863 |
| Comstock mealybug 2nd gen crawlers increasing | | 2012-2638 | 1292-1811 |
| Lesser appleworm 2nd flight peak | | 2144-3071 | 1433-2129 |
| Oriental fruit moth 2nd flight subsides | | 2024-2532 | 1346-1764 |
| Redbanded leafroller 2nd flight subsides | | 2160-2711 | 1455-1868 |
| San Jose scale 2nd flight peak | | 2137-2493 | 1440-1742 |
| Spotted tent. leafminer 2nd gen flight subsides | | 2002-2361 | 1323-1630 |
| White apple leafhopper 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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