

scaffolds

Update on Pest Management
and Crop Development

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

July 20, 2015

VOLUME 24, No. 17

Geneva, NY

DOGWOOD
DAYS

ORCHARD
RADAR
DIGEST



MIDSUMMER
MEALYBUGS
(Art Agnello,
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MAKES
YOUR
SKIN
CRAWL

[H = Highland; G = Geneva]:

Roundheaded Appletree Borer

Peak RAB egg hatch roughly: July 4 to July 23
(H)/July 7 to July 29 (G).

Dogwood Borer

Peak DWB egg hatch roughly: July 24 (H)/July
29 (G).

Codling Moth

Codling moth development as of July 20:

1st generation adult emergence at 98% (H)/93%
(G) and 1st generation egg hatch at 80% (H)/58%
(G).

White Apple Leafhopper

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

❖❖ The first generation of Comstock mealybugs likely came and went without much notice this year, since we had very unfavorable weather for them at the time they normally start showing up (late June), but for management efforts, we normally focus on the summer brood, which occurs sometime during the 3rd week of July in the Hudson Valley, and shortly thereafter in western N.Y. Now would be a good time to note the presence of any potentially problematic populations in your peaches or pears, in order to be prepared for any needed management decisions. The following information is taken from the Comstock Mealybug IPM Fact Sheet, No. 22:

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- ❖ Orchard Radar Digest
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GENERAL INFO

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INSECT TRAP CATCHES

PEST FOCUS

UPCOMING PEST EVENTS

There are two generations of Comstock mealybug in New York, each taking 60 to 90 days to complete, depending on seasonal temperatures. The egg is generally thought to be the primary overwintering stage, but some nymphs and adult females from the second (summer) generation may also overwinter, with eggs being laid in the spring rather than the previous fall. Adult females and males emerge at the same time, from late June to mid-July for the first (overwintering) generation, and late August to mid-September for the second (summer) generation. Adult females are present for a total of 4–6 weeks, and oviposit for about one week after mating. Males survive for only a few days after emerging.

The elongate, orange-yellow eggs are laid in jumbled masses along with waxy filamentous secretions in protected places such as under bark crevices, near pruning cuts, and occasionally in the calyx of fruit. The summer-generation eggs are laid from mid-June through late July, and the overwintering eggs from mid-August into October. The early larval instars of the CMB are similar to adult females (wingless and elongate-oval in shape, with a many-segmented body) except that they are smaller, more oval-shaped, lack the long body filaments, and are orange-yellowish because they have less wax covering. Later instars are similar in appearance, but become progressively browner and redder.

The overwintered eggs hatch from mid-April through May and the nymphs (crawlers) migrate from the oviposition sites to their feeding sites on terminal growth and leaf undersides of trees and shrubs. This hatch is completed by the petal fall stage of pears. Nymphs that hatch from these overwintered eggs are active from roughly early May to early July (i.e., as in the above-mentioned reports). As the nymphs approach the adult stage, they tend to congregate on older branches at a pruning scar, a node, or at a branch base, as well as inside the calyx of pears. Second- (summer) generation nymphs are present from about mid-July to mid-September.

The Comstock mealybug poses two major concerns for the pear processing industry of New York: First, the emergence of crawlers and adult females from the calyx of pears at the packing-house creates a nuisance to workers. Second, pears to be made into puree typically are not peeled or cored by processors who buy New York fruit, so infestations can potentially result in unacceptable contamination of the product.

Another problem, of concern to apple growers in the 1930s and 1940s, and again in the Hudson and Champlain Valleys in the early 1980s, is that the honeydew secreted by the crawlers is a substrate for sooty molds growing on the fruit surface. This problem also occurs on peaches in Ontario, Canada. These molds result in a downgrading of the fruit, and are therefore an additional cause of economic loss.

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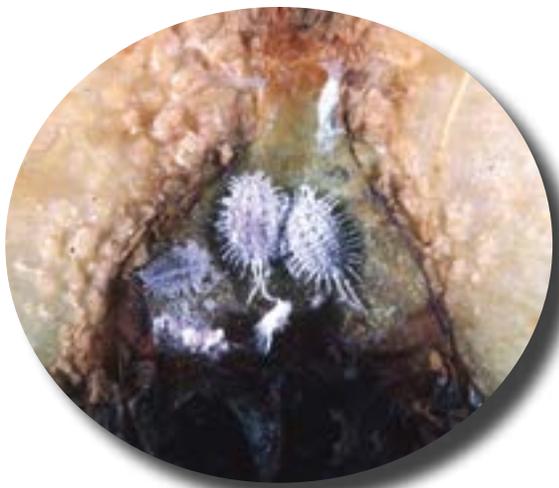
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To date, the Comstock mealybug has been a problem to growers of processing pears because of the contamination and aesthetic reasons noted. An infestation generally requires one or more insecticide sprays during the growing season, directed against the migrating crawlers. Examine the terminal growth for crawler activity periodically throughout the summer. Crawler and adult female activity can be monitored best by wrapping white, double-sided carpet tape around low scaffold branches and inspecting for crawlers that have been caught on the tape. They can be recognized with a hand lens or, with some experience, by the unaided eye.

We expect summer crawlers to appear in problem blocks over the next –2 weeks, for which an application of a material such as Actara (pears only), Admire (pears only), Assail (apples & pears only), Centaur, Movento, or Portal would be advised to control this insect.



FRUIT
TOUR

EVENT
ANNOUNCEMENTS

WAYNE COUNTY FRUITGROWER TOUR

Wednesday, August 5, from 9:30 am
Registration and 1st stop at Wilbert's Fruit Farm, Walworth-Ontario Rd, Walworth, NY (GPS: N 43.160577, W 77.287325)

❖❖ Sponsored by agr.assistance, this large, informative and entertaining tour is in its 17th year, and will feature presentations on return bloom, pollination & crop set, frost control, apple scab and fire blight control, hard cider production, improving tree growth, black stem borer, plus much more. Door prizes, lunch, a light-hearted atmosphere, 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.

BIRD DAMAGE MANAGEMENT
WORKSHOP

Wednesday, August 19, 8:30 AM to 4:00 PM

Cornell University will be holding a bird damage management workshop on Aug. 19 at CCE-Saratoga County, 50 W. High St, Ballston Spa, NY, offering comprehensive knowledge about successful bird management strategies in susceptible fruit crops, including sweet and tart cherry, blueberry, Honeycrisp apples and wine grapes. Morning session topics: which bird species damage fruit, economic losses to fruit from birds, consumer preference for man-

GENERAL INFO

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agement tactics, NY grower survey, tactics for deer management, regulations & permitting for wildlife control, landscape factors that place fruit at risk, and bird mitigation strategies (Morning session available via WebEx webinar). Afternoon session: On-farm field demonstrations of scare tactics such as falconry, air dancers, discussion of tactics being used on representative farms. Registration fee, \$10; advance registration is required by August 12. Contact: Marcie Vohnoutka, ENY Commercial Horticulture Program, 518-272-4210; mmp74@cornell.edu. DEC credits are being requested.



PEST FOCUS

Geneva: **Lesser appleworm** 2nd flight underway.

Highland: **Obliquebanded leafroller** 2nd flight beginning.

INSECT TRAP CATCHES (Number/Trap/Day)

	Geneva, NY				Highland, NY	
	<u>7/13</u>	<u>7/16</u>	<u>7/20</u>		<u>7/13</u>	<u>7/20</u>
Redbanded leafroller	1.7	1.8	0.9	Redbanded leafroller	0.0	0.0
Spotted tentiform leafminer	12.0	10.5	8.5	Lesser appleworm	0.2	2.8
Oriental fruit moth	1.7	0.7	2.0	Oriental fruit moth	0.5	0.8
Lesser appleworm	0.2*	0.0	0.3	Codling moth	1.7	6.1
Codling moth	0.0	0.0	0.0	Spotted tentiform leafminer	26.2	17.2
American plum borer	0.0	0.0	0.0	San Jose scale	33.9	61.4
Lesser peachtree borer	1.0	0.0	0.3	Dogwood borer	1.7	3.9
Peachtree borer	0.0	0.2	0.1	Obliquebanded leafroller	0.4	0.1
Dogwood borer	–	7.8	5.4	Tufted apple budmoth	0.0	0.0
Pandemis leafroller	0.0	0.0	0.0	Apple maggot	0.1	0.1
Obliquebanded leafroller	0.4	0.2	0.1			
Apple maggot	0.3	0.3	0.5			

* first catch

UPCOMING PEST EVENTS

	43°F	50°F
Current DD* accumulations (Geneva 1/1–7/20/15):	1833	1223
(Geneva 1/1–7/20/2014):	1899	1274
(Geneva "Normal"):	1987	1244
(Geneva 1/1–7/27, predicted):	2025	1366
(Highland 1/1–7/20/15):	2229	1540

<u>Coming Events</u>	<u>Ranges (Normal ±StDev):</u>	
Oriental fruit moth 2nd flight peak	1451–1969	925–1323
American plum borer 2nd flight begins	1557–2089	1029–1395
Comstock mealybug 1st flight subsides	1818–2132	1216–1418
Codling moth 2nd flight begins	1563–2251	1019–1511
Dogwood borer flight peak	1477–1895	925–1257
Redbanded leafroller 2nd flight peak	1553–1993	997–1337
STLM 2nd gen. tissue feeders present	1378–2035	913–1182
Spotted tentiform leafminer 2nd flight subsides	1994–2366	1316–1634
Apple maggot 1st oviposition punctures	1605–2157	1144–1544
Obliquebanded leafroller 1st flight subsides	1610–2040	1046–1374
San Jose scale 2nd flight begins	1629–1979	1058–1336

*[all DDs are 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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