

scaffolds

Update on Pest Management
and Crop Development

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

July 26, 2010

VOLUME 19, No. 19

Geneva, NY

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WANING AGAIN

ORCHARD
RADAR
DIGEST



of their fruit, similar in appearance to those caused by a stem puncture. Although graders sometimes attribute this damage to apple maggot or European corn borer, cutting open these apples reveals a bright green worm with a light brown head, 3 pairs of true legs and 7 pairs of prolegs, not feeding but lying inactive, in the burrow extending in from each hole. These are larvae of the dock

sawfly, *Ametastegia glabrata*, a highly sporadic but nonetheless well documented apple pest that has been known to show up in our area since 1908.

Dock sawfly probably confines its feeding almost entirely to plants belonging to the buckwheat family (Polygonaceae), including numerous docks and sorrels, the knotweeds and bindweeds, or else wild buckwheat or alfalfa. In feeding on any of these plants, the larvae devour the leaf tissue and the smaller veins, eating out irregular holes in the

continued...

Codling Moth

Codling moth development as of July 26: 2nd generation adult emergence at 63% and 2nd generation egg hatch at 24%.

2nd generation 30% CM egg hatch: July 27 (= target date where one spray needed to control 2nd generation codling moth).

Spotted Tentiform Leafminer

Optimum third sample date for 2nd generation STLM sapfeeding mines, if needed, is: July 23.

White Apple Leafhopper

2nd generation WAL found on apple foliage: July 23.

THAT OLD SAW

DOCK STRIKE
(Art Agnello, Entomology, Geneva)

❖❖ The dock sawfly always sneaks in during the waning days of summer. Following is a repeat of our annual write-up on this pest:

Before and during apple harvest in recent years, a number of growers and fieldmen have been unpleasantly surprised by the appearance of neat little (2 mm) holes bored into the side

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GENERAL INFO

- ❖ Events reminder

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INSECT TRAP CATCHES

UPCOMING PEST EVENTS

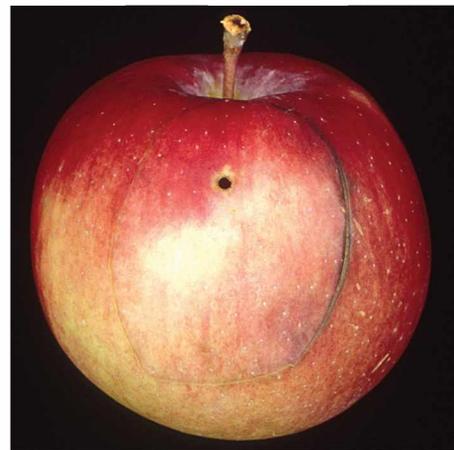
leaves. Ordinarily, the midribs and the larger veins are untouched. This insect should not be confused with the related European apple sawfly, *Hoplocampa testudinea*, which has a whitish larva that lives and feeds in young apples, particularly prevalent in the eastern apple regions of N.Y.

Injury to apples by the dock sawfly is known to occur generally in the late summer and early fall, when the fruit is approaching maturity and the sawfly is searching for an overwintering site. The greater hardness of immature apples probably deters the larvae from burrowing into these, so although 4 generations per year have been identified, only the last one or two are of concern to apple growers. The injury to apples consists externally of the small round holes bored by the larvae, which after a few days show a slightly sunken, brownish ring around them and occasionally may be surrounded by a larger discolored halo. These holes may occur anywhere on the surface, but are most numerous around the calyx and stem ends, or at a point where the apple touches a leaf or another apple, since it is easier for the larva to obtain a foothold here. Inside, the injury is usually more serious, since the larva often burrows to the core and usually hollows out a pupal cell somewhat larger than itself. Apples may have three or four, or sometimes even eight, holes in them of varying depths, but contain only one or two worms.

Since the dock sawfly does not feed upon any part of the apple tree, but must live on the above-mentioned succulent weeds, it becomes an apple pest only where these plants are growing in or around the orchard. There is little danger from this insect in orchards where the food plants don't exist. Likewise, the possibility of the larvae coming into the orchard from neighboring meadows, ditch banks, or roadsides is slight, for the larvae are incapable of finding their way over any extent of bare soil. The adults, though active, are not strong fliers, and it is not possible for the insect to travel far in this stage. Now would be a good time to assess the weed situation in your orchard and make plans for such selective herbicide applications as may

be appropriate regarding this insect. Even though common wisdom says this sawfly is a pest only every 10-12 years, this is only an average estimation, and it's not a bad idea to anticipate the unexpected when hardly any season is considered to be "average".

(Information adapted from Newcomer, E. J. 1916. The dock false-worm: An apple pest. USDA Bull. 265, 40 pp.)❖❖



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This newsletter available online at: <http://www.nysaes.cornell.edu/ent/scaffolds/>

MODEL BUILDING

Following are the available readings as of today.

Insect model degree day accumulations:

Codling Moth (1st targeted spray application at newly hatching larvae of the 2nd generation, predicted at 1260–1370 DD base 50°F after 1st adult catch of the 1st generation):

<u>Location (Weather Sta.)</u>	<u>Biofix</u>	<u>DD (50°F)</u>	<u>Date</u> 1260 DD <u>reached</u>	<u>Date</u> 1370 DD <u>reached</u>
Highland	May 7	1538	July 15	58
Burnt Hills (Glens Falls)	May 7	1314	July 23	-
Marlboro	May 10	1354	July 15	-
Modena (Clintondale)	May 10	1355	July 24	-
Newfield (Cornell Orch)	May 11	1358	July 21	-
Waterport	May 19	1322	July 16	-
Hilton (Waterport)	May 19	1322	July 16	26
Lincoln (Farmington)	May 19	1218	-	-
Lyndonville	May 19	1305	July 21 (thru 7/23)	-
Granville (Clifton Park)	May 21	1346	July 21	-
Altamont (Guilderland)	May 21	1368	July 21	-
Lafayette	May 25	1164	-	-
Sodus	May 27	1062	-	-
Wolcott (Sodus)	May 27	1062	-	-
Chazy	May 31	1222	-	-
Peru (South Hero, VT)	May 31	1100	-	-
Alton (Williamson)	June 3	980	-	-

[NOTE: Consult our insect pest predictions on the NEWA Apple Insect Models web page:

http://newa.nrcc.cornell.edu/newaModel/apple_pest

Find accumulated degree days for the current date with the Degree Day Calculator:

<http://newa.nrcc.cornell.edu/newaLister/dday>

Powered by the NYS IPM Program's NEWA weather data and ACIS, Northeast Regional Climate Center]

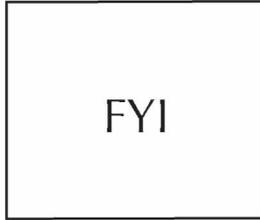
Regional Trap Numbers**Week Ending 7/26, Avg No./trap**

<u>Location/County</u>	<u>Date</u>	<u>STLM</u>	<u>OFM</u>	<u>LAW</u>	<u>CM</u>	<u>OBLR</u>	<u>AM</u>
Lyndonville/Orleans	7/23	116	7.0	17.7	0.3	0.0	2.3
Waterport/Orleans	7/23	11.3	10.0	11.7	0.0	0.3	6.0
Hilton/Monroe	7/23	201	0.0	6.0	0.3	0.3	2.7
Lincoln/Wayne	7/22	66.0	0.0	6.0	0.0	0.0	1.0
Sodus-Lakesite/Wayne	7/22	13.3	0.0	0.3	0.0	0.3	1.3
Sodus-Inland/Wayne	7/22	10.7	0.0	0.7	0.0	0.7	1.0
Alton/Wayne	7/22	45.3	0.3	5.7	0.0	0.0	2.3
Wolcott/Wayne	7/20	26.7	0.0	3.7	0.0	0.0	0.7
Newfield/Tompkins	7/19	128	0.3	0.7	0.7	0.3	13.5
Lafayette/Onondaga	7/20	351	0.0	9.7	1.0	0.0	1.0
Chazy/Clinton	7/20	648	0.7	6.7	0.0	0.0	7.3
Valcour/Clinton	7/20	60.0	0.3	14.7	0.7	0.0	4.3
Peru/Clinton	7/20	209	0.0	1.0	0.7	0.0	8.7
Granville/Washington	7/23	277	0.0	50.6	2.3	1.3	0.0
Burnt Hills/Saratoga	7/23	133	1.0	0.0	15.0	1.5	2.5
Altamont/Albany	7/23	0.0	0.0	0.0	27.0	1.0	0.5
Modena/Ulster	7/22	440	0.0	3.0	0.0	2.0	15.0
Marlboro/Ulster	7/22	10.5	0.0	12.5	13.5	5.5	4.5
Accord/Ulster	7/26	225	10.0	0.0	4.0	2.0	1.0

INSECT TRAP CATCHES**(Number/Trap/Day)**

	Geneva, NY			Highland, NY		
	<u>7/19</u>	<u>7/22</u>	<u>7/26</u>		<u>7/19</u>	<u>7/26</u>
Redbanded leafroller	0.1	0.2	0.0	Redbanded leafroller	1.0	1.3
Spotted tentiform leafminer	11.2	8.0	8.1	Spotted tentiform leafminer	29.9	13.1
Oriental fruit moth	2.6	5.0	3.1	Oriental fruit moth	2.9	4.7
Lesser appleworm	0.2	0.0	0.1	Lesser appleworm	1.1	1.9
American plum borer	0.1	0.2	0.0	Codling moth	2.2	4.4
Lesser peachtree borer	0.1	0.0	0.0	Obliquebanded leafroller	0.9	0.7
San Jose scale	8.1	4.8	8.4	Apple maggot	0.5	0.7
Obliquebanded leafroller	0.0	0.0	0.0			
Peachtree borer	0.1	0.0	0.0			
Apple maggot	10.4	9.7	17.5			

* first catch

EVENT
REMINDERS

CORNELL FRUIT FIELD DAYS, JULY 28-29

Cornell University will host the 2010 Fruit Field Days at the New York State Agricultural Experiment Station in Geneva, NY, on Wednesday and Thursday, July 28 & 29, from 8:00 a.m. to 5:00 p.m. each day. Grapes and berry fruits will be the focus on July 28, and tree fruits will be covered on July 29. The pre-registration deadline has passed, but walk-in registration including a lunch will be possible for a limited number of people for \$20 on each day. For information on location and program content, refer to the NYSAES web page (<http://www.nysaes.cornell.edu/>) and the Cornell Fruit web page (<http://www.fruit.cornell.edu/>).

WAYNE COUNTY FRUITGROWER TOUR

Wednesday, August 11, from 10:30 am

Registration and 1st stop at Wafler Farms & Nursery new storage facility

Sponsored by agr.assistance, this large, informative and entertaining tour is in its 12th year, and will feature presentations on apple storage; PGR, return bloom and nutritional developments; updates on apple disease, insect, and deer control; orchard fertility; bitter pit; herbicide options, plus much more. Door prizes, lunch, high (and low) humor, BBQ/clambake dinner with a live band, growers and industry representatives from NY and surrounding states — tough to beat on a midsummer day. Free attendance.

Contact Lindsay LaMora (585-734-8904; lindsaylamora@agrassistance.com) for RSVP pre-registration and tour information.

CORNELL FRUIT PEST CONTROL FIELD DAY

The N.Y. Fruit Pest Control Field Day will take place during Labor Day week on Sept. 8 and 9 this year, with the Geneva installment taking place first (Wednesday Sept. 8), and the Hudson Valley installment on the second day (Thursday Sept. 9). Activities will commence in Geneva on the 8th, 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 by noon. On the 9th, 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.

UPCOMING PEST EVENTS

	<u>43°F</u>	<u>50°F</u>
Current DD accumulations (Geneva 1/1–7/26/10):	2432	1689
(Geneva 1/1–7/26/2009):	1916	1211
(Geneva "Normal"):	2073	1387
(Geneva 1/1–8/2 predicted):	2631	1840
(Highland 3/1–7/26/10):	2412	1635

<u>Coming Events:</u>	<u>Ranges (Normal ±StDev):</u>	
Spotted tentiform leafminer 3rd flight begins	2246–2644	1502–1832
American plum borer 2nd flight peak	1983–2459	1338–1676
Codling moth 2nd flight peak	1931–2735	1278–1892
Comstock mealybug 2nd gen. crawlers emerge	2234–2624	1505–1781
Comstock mealybug 2nd gen. crawlers peak	2380–2624	1658–1737
Oriental fruit moth 3rd flight begins	2306–2712	1563–1867
Redbanded leafroller 2nd flight subsides	2192–2668	1482–1830
San Jose scale 2nd flight peak	2103–2499	1411–1749
Apple maggot flight peak	2094–2540	1405–1739
Dogwood borer flight peak (Wayne County)	1698–2530	1109–1679
Lesser appleworm 2nd flight peak	2120–3130	1412–2172
Obliquebanded leafroller 2nd flight begins	2255–2655	1516–1838

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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