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Update on Pest Management and Crop Development
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COMING EVENTS

	43°F	50°F
Current DD* accumulations		
(Geneva 1/1-4/30):	127.9	46.7
(Geneva 1/1-4/30/2017):	343.0	164.4
(Geneva "Normal"):	260.6	124.5
(Geneva 1/1-5/7, predicted):	267.8	140.9
(Highland 1/1-4/30):	236.6	92.8

Upcoming Pest Events – Ranges (Normal +/- Std Dev):

Black stem borer 1st catch	249-374	104-200
Comstock mealybug		
1st gen crawlers in pear buds ..	215-441	80-254
European red mite egg hatch	231-337	100-168
Green fruitworm peak catch	96-231	37-109
Green apple aphids present	111-265	38-134
Obliquebanded leafroller		
larvae active	158-314	64-160
Oriental fruit moth 1st catch	223-323	96-163
Pear psylla 1st egg hatch	174-328	60-166

Pear thrips in pear buds	118-214	50-98
Redbanded leafroller		
1st flight peak	230-378	104-197
Rose leafhopper		
1st nymphs on multiflora rose..	239-397	96-198
Rosy apple aphid		
nymphs present	134-244	56-116
Spotted tentiform leafminer		
1st catch.....	118-218	45-102
Spotted tentiform leafminer		
1st oviposition.....	143-273	58-130
McIntosh half-inch green	150-201	63-94
McIntosh tight cluster	206-257	91-125
McIntosh pink.....	267-316	123-158

*[all DDs Baskerville-Emin, B.E.]

Phenologies

Geneva:	Current	5/7, Predicted
Apple		
(McIntosh, Red Del.):	green tip	tight cluster
Apple (Empire, Idared):	green tip	tight cluster
Pear		
(Bartlett):	swollen bud	green cluster
(Bosc):	50% swollen bud	green cluster
Sweet Cherry	swollen bud	white bud/ bloom

Tart Cherry:	early bud burst	white bud
Peach:	swollen bud	pink
Plum:	early bud burst	green cluster
Apricot:	early bud burst	bloom

Highland:
Apple
(McIntosh): 52% half-inch green
(Golden Del.): 32% half-inch green
(Ginger Gold): 3% tight cluster
(Red Delicious): 92% half-inch green
Pear
(Bartlett): 4% green cluster
(Bosc): 19-68% bud burst
Peach: 38-81% bud burst
Plum: 87% swollen bud

PEST FOCUS
Highland: 1st sustained Pear Psylla nymph count today, 4/30.

TRAP CATCHES (Number/trap)
Geneva

	4/16	4/23	4/27	4/30
Green Fruitworm	0.0	0.5*	1.0	0.0
Redbanded Leafroller	0.0	0.5*	5.5	1.5

Spotted Tentiform Leafminer	0.0	0.0	0.0	0.0

Highland (Peter Jentsch)

	4/9	4/16	4/23	4/30
Green Fruitworm	0.0	0.0	0.5	0.0
Redbanded Leafroller	0.0	28.0	8.5	97.5
Spotted Tentiform Leafminer	0.0	0.0	3.0*	29.0
Lesser Appleworm	0.0	0.0	1.5*	4.5

* 1st catch

[Section: DISEASES]

Weekly Apple Scab Update for NY (4/30 to 5/5/18)
(Kerik Cox & Katrin Ayer, PP&PMB, Geneva)
Below are apple scab predictions for NY apple regions based on the NEWA disease forecast system (http://newa.cornell.edu/index.php?page=apple-diseases). Information is kept concise. Alerts will also be posted to Twitter @FruitPathology with updates occurring throughout the week, which would allow notifications to send to mobile device. The various outputs are explained below the table.

Week of 4/30/18*	**Hudson Valley**	**Wayne**	**Niagara**	**Champlain Valley**	**Finger Lakes**
Infection Predicted	None	Low (5/3)	Low (5/3)	Not @ green tip	Low (5/3)
Maturity	60%	9%	6%	--	16%

Discharge	20%	8%	4%	--	7%

* predictions are regional, the model works best under local conditions. Always check weather and crop stage (green tip) before making a management decision.

Infection predicted:

- **"Low"**: <10% ascospores discharged; "**Moderate"**: 10-20% ascospores; "**High**: >20% ascospores discharged
- "**None**" – no infection predicted for the week; "**Date"**: An infection event is predicted for the date listed. If a multi-day infection event is predicted, the first full date of the infection will be listed

Ascospore maturity: The percent ascospore maturity during the predicated infection event. If there is no infection predicted, the maturity for the end of the week is listed.

Discharge: The percent ascospore discharge during the predicted infection event. If no infection predicted, the cumulative ascospore discharge for the week is listed.

[Section: INSECTS]

INVASIVES AT THE DOOR

(Juliet Carroll, NYS IPM Program, Geneva, jec3@cornell.edu; [excerpted, A. Agnello, Entomology, Geneva]

[Box text: IT CAME FROM BEYOND]

Most people are aware of the increasing frequency with which invasive species are being detected in our crop systems, and the resulting concern over the damage they can cause if not properly addressed. Two of the newest invasive pests to appear on the scene, European cherry fruit fly and spotted lanternfly, have yet to make a significant impact on NY fruit production, but this could change quickly if they spread more quickly than we are able to respond to them.

European Cherry Fruit Fly

Scouting methods are available for European cherry fruit fly. This is a Tephritid fly, similar to black cherry fruit fly, cherry fruit fly, apple maggot, and blueberry maggot. This insect is present in Ontario, Canada; it was initially found there in 2016. Unfortunately, in 2017, it was also found along the Niagara River in NY. This species can also infest honeysuckle fruit, as well as cherry. Among *Prunus* spp., it prefers sweet cherry. Because Tephritids are not strong fliers and tend to overwinter in the soil near the plants upon which they fed the prior year, the USDA APHIS had

initially considered an eradication effort for this insect; however, it now appears they are focusing more on a trapping-based management plus quarantine approach. The NYS Department of Agriculture and Markets is coordinating these efforts with USDA APHIS, and will be continuing their trap monitoring activities this season with the assistance of fruit specialists in IPM and Entomology. A NYS IPM fact sheet on this insect can be found at http://hdl.handle.net/1813/53834

Spotted Lanternfly

Spotted lanternfly has been present in Pennsylvania for a few years now and their eradication efforts have slowed the spread of this insect, but not halted it. It is now found in Delaware and is starting to show up in adjacent states. These showy insects are agricultural and household pests. Its feeding behavior is like that of a huge pear psylla – sucking plant sap and excreting it in forcible splatters that contaminate the areas around the trees upon which it is feeding. Sooty molds grow and sticky surfaces are unapproachable on and near heavily infested trees. This insect has a large host range. We are concerned for the grape and apple industries, should this insect become established in NY. There is also great concern for the forestry industry, ornamentals, and landscapes.

Perhaps a silver lining we can exploit against spotted lanternfly is that it requires tree-of-heaven, *Ailanthus altissima*, in order to successfully reproduce (at least under laboratory conditions), although hops may also serve this purpose. Tim Weigle and I have been scouting for *Ailanthus* trees around vineyards and orchards and have found none so far. This tree was sold and planted as a reclamation species in the 1960s. In Pennsylvania, they are exploiting this by removing most *Ailanthus* and then treating those remaining with a systemic insecticide to kill spotted lanternfly that settle to reproduce and feed.

What should you do? Familiarize yourself with spotted lanternfly and *Ailanthus*. If you suspect you've got this insect, please let your consultant, Cornell Extension, Extension entomologist, or IPM educator know. Get the word out. Let's find this before it gets out of hand. For a NYS IPM fact sheet on this pest, go to http://hdl.handle.net/1813/43943. The Penn State website has more information on spotted lanternfly, and some creepy videos, at: http://ento.psu.edu/extension/fruit/pest-alert-spotted-lanternfly

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