

2018 Final Report-Apple/Tomato Commodity Survey for VT Agency of Ag, Food and Markets
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TOMATO COMMODITY SURVEY

Conduct moth trapping surveys at 10 sites in 7 counties, one trap per site for each of the five arthropod pests species listed below:

- Silver Y Moth (*Autographa gamma*)
- Egyptian Cottonworm (*Spodoptera littoralis*)
- Old World Bollworm (*Helicoverpa armigera*)
- Golden Twin Spot Moth (*Chrysodeixis chalcites*)
- Tomato Leaf Miner (*Tuta absoluta*)

Counties included Chittenden (UVM Horticultural Research Center, Intervale Community Farm, Jericho Settlers Farm and Hazelrigg Farm), Addison (Singing Cedar Farmstead), Grand Isle (Pomykala Farm), Lamoille (The Farm Between), Washington (Halverson Farm), Orleans (Pete's Greens) and Franklin (Hudak Farm).

Appropriate traps for each pest were set out and brought back to the UVM Plant Diagnostic Clinic to be examined on an approximate 14 day schedule from June through September, 2018. Lures were changed at appropriate times as dictated by pest and trap.

All survey activity followed the approved methods and survey guidelines presented in the CAPS-approved methods for survey and identification/diagnostics of 2018 CAPS target pests from the Priority Pest List if available.

Results: None of the pests listed were found at any of the 10 sites in 7 counties on any date (greenhouse or field tomatoes).



APPLE COMMODITY SURVEY

Conduct moth trapping surveys at 10 sites in 7 counties, one trap per site for each of the five arthropod pests species listed below:

- Variegated Golden Tortrix Moth (*Archips xylosteana*)
- Cherry Bark Tortrix (*Enarmonia formosana*)
- Light Brown Apple Moth (*Epiphyas postvittana*)
- Summer Fruit Tortrix Moth (*Adoxophyes orana*)
- Pear Leaf Blister Moth (*Leucoptera malifoliella*)

Counties included Chittenden (Hazelrigg Orchard, UVM Horticultural Research Center (UVM HRC) and Shelburne Orchard), Addison (Boire Orchard), Grand Isle (Allenholm Orchard and Hackett's Orchard), Washington (Peck Orchard), Orange (Liberty Orchard), Lamoille (The Farm Between) and Bennington (Mad Tom Orchard).

Appropriate traps for each pest were set out and brought back to the UVM Plant Diagnostic Clinic to be examined on a 14 day schedule from June through September, 2018. Lures were changed at appropriate times as dictated by pest and trap.

All survey activity followed the approved methods and survey guidelines presented in the CAPS-approved methods for survey and identification/diagnostics of 2018 CAPS target pests from the Priority Pest List if available.

Results: None of the pests listed were found at any of the 10 sites in 7 counties on any date.

Orchards (apple) and farms (tomato) surveyed, Summer 2018

Apple		Tomato	
Orchard Name	VT County	Farm Name	VT County
Shelburne Orchards	Chittenden	Hudak Farm	Franklin
UVM HRC	Chittenden	Pomykala Farm	Grand Isle
Hazelrigg Orchard	Chittenden	Halverson Garden	Washington
The Farm Between	Lamoille	Singing Cedar Farmstead	Addison
Hackett's Orchard	Grand Isle	Hazelrigg Garden	Chittenden
Allenholm Orchard	Grand Isle	Jericho Settlers Farm	Chittenden
Boire Orchard	Addison	UVM HRC	Chittenden
Peck Orchard	Washington	Intervale Community Farm	Chittenden
Liberty Orchard	Orange	Pete's Greens	Orleans
Mad Tom Orchard	Bennington	The Farm Between	Lamoille

Sites (coordinates and address)

1. Allenholm Orchard (44.644245, -73.302394) 11 South St, South Hero, VT 05486
2. Boire Orchard (43.5141, -73.1818) 241 Brown Road, Shoreham VT, 05770
3. Hackett's Orchard (44.6344, -73.3029) 86 South St, South Hero, VT 05486
4. Halverson Garden (44.2282, -72.6180) 138 White Rock Drive, Montpelier, VT 05602
5. Hazelrigg Orchard/Farm (44.432057, -73.123497) 206 Walker Hill Road, Williston, VT 05495
6. Hudak Farm (44.8491, -73.0884) 599 St Albans Road, Swanton, VT 05488
7. Intervale Community Farm (44.496496, -73.205442) 282 Intervale Road, Burlington, VT 05401
8. Jericho Settlers Farm (44.4645, -72.9782) 22 Barber Farm Road, Jericho, VT 05465
9. Liberty Orchard (44.0206, -72.6249) 2622 VT-65, Brookfield, VT 05036
10. Mad Tom Orchard (43.2672, -72.9909) 2615 Mad Tom Road, East Dorset, VT 05253
11. Peck Orchard (44.3108, -72.501182) 750 Sibley Road, East Montpelier, VT 05651
12. Pete's Greens (44.6329, -72.3698) 266 S Craftsbury Road, Craftsbury, VT 05826
13. Pomykala Farm (44.7474, -73.2710) 197 E Shore North, Grand Isle, VT 05458
14. Shelburne Orchard (44.3519, -73.2660) 216 Orchard Road, Shelburne, VT 05482
15. Singing Cedar Farmstead (43.7689, -73.3405), 30 Black Snake Lane, Orwell, VT 05760
16. The Farm Between (44.6452, -72.8550) 3727 VT-15, Jeffersonville, VT 05464
17. UVM HRC (44.4307, -73.2043) 65 Green Mountain Drive, S. Burlington, VT 05403

Survey dates (traps set and/or collected)

Traps replaced every two weeks at each site (orchard or farm/greenhouse) from June to September, 2018. All traps were set out around the last week of June and changed approximately every 14 days; 6/25, 7/09, 7/23, 8/06, 8/20, 9/03, 9/17 and 10/03.

Lures were replaced according to protocol for efficacy period (see tables below).

2018 Apple Commodity Survey

Survey	Scientific Name	Common Name	Trap Type	IPHIS Product ID	# of Traps	Lure Type	# Liners	# Lures	Lure Efficacy (days)
Apple Commodity Survey	<i>Archips xylosteana</i>	Variegated Golden Tortrix Moth	Wing trap (plastic)	27	20	<i>A. xylosteana</i> rubber septum	80	40	28
	<i>Enarmonia formosana</i>	Cherry Bark Tortrix Moth	Paper delta (2 sticky sides, green)	110	90	<i>E. formosana</i> rubber septum	NA	40	28
	<i>Epiphyas postvittana</i>	Light Brown Apple Moth	Jackson trap body	5	15	<i>E. postvittana</i> rubber septum	80	30	42
	<i>Adoxophyes orana</i>	Summer Fruit Tortrix Moth	Paper delta (2 sticky sides, orange)	109	90	<i>A. orana</i> rubber septum	NA	20	84
	<i>Leucoptera malifoliella</i>	Pear Leaf Blister Moth	Large plastic delta (white)	103	15	<i>L. malifoliella</i> rubber septum	90	20	70

10 sites, 7 counties, 5 traps for 5 pests per site.
50 traps per cycle

2018 Tomato Commodity Survey

Survey	Scientific Name	Common Name	Trap Type	IPHIS Product ID	# of Traps	Lure Type	# Liners	# Lures	Lure Efficacy (days)
Tomato Commodity Survey	<i>Autographa gamma</i>	Silver Y Moth	Plastic Bucket (unitrap)	18	10	<i>A. gamma</i> rubber septum	NA	40	28
	<i>Spodoptera littoralis</i>	Egyptian Cottonworm	Plastic Bucket (unitrap)	18	10	<i>S. littoralis</i> laminate lure	NA	30	84
	<i>Helicoverpa armigera</i>	Old World Bollworm	Plastic Bucket (unitrap)	18	10	<i>H. armigera</i> rubber septum	NA	40	28
	<i>Chrysodeixis chalcites</i>	Golden Twin Spot Moth	Wing trap (plastic)	27	20	<i>C. chalcites</i> rubber septum	80	40	28
	<i>Tuta absoluta</i>	Tomato Leaf Miner	Large delta trap (plastic)	103	15	<i>T. absoluta</i> rubber septum	90	40	28

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