

**2019 Final Report – Tree Fruit Commodity Survey for VT Agency of Ag, Food and Markets
Ann Hazelrigg, Ph.D. and Gabriella Maia, M.S.**



TREE FRUIT COMMODITY SURVEY

Conduct moth trapping surveys at 10 sites in 7 counties. Three of the sites also included stone fruit. Set one trap per site for each arthropod pests species listed below. Two traps were set in orchards where apples and stone fruit were present.

- Variegated Golden Tortrix Moth (*Archips xylosteana*) – apple and stone fruit
- Cherry Bark Tortrix (*Enarmonia formosana*) – apple and stone fruit
- Light Brown Apple Moth (*Epiphyas postvittana*) – apple and stone fruit
- Summer Fruit Tortrix Moth (*Adoxophyes orana*) – apple and stone fruit
- Pear Leaf Blister Moth (*Leucoptera malifoliella*) – apple and stone fruit
- Plum Fruit Moth (*Grapholita funebrana*) – stone fruit
- European Cherry Fruit Fly (*Rhagoletis cerasi*) – stone fruit

Counties included: Addison, Bennington, Chittenden, Grand Isle, Lamoille, Orange and Washington

Specific 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, 2019. Lures were changed at appropriate times as dictated by pest and trap

All survey activity followed the approved method and survey guidelines for pest surveillance in the CAPS Pest Datasheet (<https://pest.ceris.purdue.edu/>).

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

Orchards surveyed, summer 2019

Orchard Name	VT County	Commodity
Allenholm Orchard	Grand Isle	apple
Boire Orchard	Addison	apple
Hackett's Orchard	Grand Isle	apple and stone fruit
Hazelrigg Orchard	Chittenden	apple
Liberty Orchard	Orange	apple
Mad Tom Orchard	Bennington	apple
Peck Orchard	Washington	apple
Shelburne Orchards	Chittenden	apple and stone fruit
The Farm Between	Lamoille	apple
UVM HREC	Chittenden	apple and stone fruit

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. Hazelrigg Orchard/Farm (44.432057, -73.123497) 206 Walker Hill Road, Williston, VT 05495
5. Liberty Orchard (44.0206, -72.6249) 2622 VT-65, Brookfield, VT 05036
6. Mad Tom Orchard (43.2672, -72.9909) 2615 Mad Tom Road, East Dorset, VT 05253
7. Peck Orchard (44.3108, -72.501182) 750 Sibley Road, East Montpelier, VT 05651
8. Shelburne Orchard (44.3519, -73.2660) 216 Orchard Road, Shelburne, VT 05482
9. The Farm Between (44.6452, -72.8550) 3727 VT-15, Jeffersonville, VT 05464
10. UVM HREC (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) from June to September, 2019. All traps were set out mid-June and changed approximately every 14 days; 6/10, 6/24, 7/08, 7/22, 8/05, 8/19, 9/02, 9/16 and 10/01.

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

2019 Fruit Tree Commodity Survey

Survey	Scientific Name	Common Name	Trap Type	Product ID	# of Traps	Lure Type	# Liners	# Lures	Lure Efficacy (days)
Apple Orchard Survey	<i>Archips xylosteana</i>	Variegated Golden Tortrix Moth	Wing trap kit (plastic)	27	20	<i>A. xylosteana</i> rubber septum	80	40	28
	<i>Enarmonia formosana</i>	Cherry Bark Tortrix Moth	Green Paper delta (2 sticky sides)	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	Orange Paper delta (2 sticky sides)	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.

Survey	Scientific Name	Common Name	Trap Type	Product ID	# of Traps	Lure Type	# Liners	# Lures	Lure Efficacy (days)
Stone Fruit Orchard Survey	<i>Rhagoletis cerasi</i>	European Cherry Fruit Fly	Sticky card, yellow, baited trap	20		Ammonium acetate lure, bait enhancer	NA	40	14
	<i>Grapholita funebrana</i>	Plum Fruit Moth	Wing trap kit (plastic)	27	20	<i>G. funebrana</i> rubber septum	80	30	28
	<i>Adoxophyes orana</i>	Summer Fruit Tortrix moth	Green paper delta (2 sticky sides)	110	90	<i>A. orana</i> rubber septum	NA	40	84
	<i>Epiphyas postvittana</i>	Light Brown Apple Moth	Jackson trap body	5	15	<i>E. postvittana</i> rubber septum	80	40	42
	<i>Enarmonia formosana</i>	Cherry Bark Tortrix	Brown paper delta (2 sticky sides)	108	90	<i>E. formosana</i> rubber septum	NA	40	28

3 sites, 7 counties, 5 traps for 5 pests per site.

