Final Report-Apple/Grape Commodity Survey for VT Agency of Ag, Food and Markets Ann Hazelrigg, Ph.D. and Gabriella Maia, M.S.

Grape Commodity Survey

- Traps were placed at 8 sites in 5 counties for the following arthropod pests:
 - Summer Fruit Tortrix Moth (Adoxophyes orana)
 - Light Brown Apple Moth (Epiphyas postvittana)
 - o European grape vine moth (*Lobesia botrana*)
 - o False codling moth (*Thaumatotibia leucotreta*)
 - Honeydew moth (Cryptoblabes gnidiella
- Counties included Chittenden (UVM Horticultural Research Center and 2 sites at Shelburne Vineyards), Addison (Lincoln Peak Winery), Grand Isle (East Shore Vineyard), Washington (Fresh Tracks Farm) and Lamoille (Boyden Valley Winery)
- 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, 2016. 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 2016 CAPS target pests from the Priority Pest List if available.

RESULTS: None of the pests listed were found at any of the 8 sites in 5 counties on any date.

Apple Commodity Survey

- Traps were placed at 10 sites in 5 counties for the following arthropod pests:
 - Variegated Golden Tortrix Moth (Archips xylosteanus)
 - Cherry Bark Tortrix (Enarmonia formosana)
 - Light Brown Apple Moth (Epiphyas postvittana)
 - Summer Fruit Tortrix Moth (Adoxophyes orana)
 - Plum Fruit Moth (Grapholita funebrana)
- Counties included Chittenden (Adams Apple Orchard, Hazelrigg Orchard, Hayden Orchard, Shelburne Orchards), Addison (Sunrise Orchard), Grand Isle (Allenholm Orchard, Hackett's Orchard), Washington (Bradshaw Orchard) and Orange (VT Technical College 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, 2016. 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 2016 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 5 counties on any date.

Orchards and vineyards surveyed, Summer 2016.

Apple Orchard	ds	Grape Vineyards				
Orchard Name	VT County	Vineyard Name	VT County			
Adams Apple Orchard	Chittenden	Boyden Valley Winery	Lamoille			
Allenholm Orchard	Grand Isle	East Shore Vineyard	Grand Isle			
Hazelrigg Orchard	Chittenden	Fresh Tracks Farms	Washington			
Hayden Orchard	Chittenden	Lincoln Peak Winery	Addison			
Hackett's Orchard	Grand Isle	Shelburne Vineyard-#1	Chittenden			
Shelburne Orchards	Chittenden	Shelburne Vineyard-#2	Chittenden			
Sunrise Orchard	Addison	UVM HREC	Chittenden			
Bradshaw Orchard	Washington					
UVM HREC	Chittenden					
VTC - Randolph	Orange					

Sites (coordinates and address)

- 1. Adams Family Orchard (44.4538, -73.0725) 986 Old Stage Rd, Williston, VT 05495
- Allenholm Orchard (44.644245, -73.302394) 11 South St, South Hero, VT 05486
- 3. Boyden Valley Winery (44.6474, -72.8892) 64 VT-104, Cambridge, VT 05444
- 4. Bradshaw Orchard (44.339578, -72.529404) 1189 Wheeler Road, Calais, VT 05648
- 5. Hayden Orchard (44.427025, -73.155122) 3054 Hinesburg Road, South Burlington, Vermont, 05403
- 6. Hazelrigg Orchard (44.432057, -73.123497) 206 Walker Hill Road, Williston, VT 05495
- 7. East Shore Vineyard (44.6280, -73.2849) 20 E Shore Rd, South Hero Vermont, VT 05486
- 8. Fresh Tracks Farm Vineyard & Winery (44.2282, -72.6180) 4373 VT-12, Montpelier, VT 05602
- 9. Hackett's Orchard (44.6344, -73.3029) 86 South St, South Hero, VT 05486
- 10. Lincoln Peak Winery (44.0557, -73.1646) 142 River Road, New Haven, VT 05472
- 11. Shelburne Orchards (44.3519, -73.2660) 216 Orchard Road Shelburne, VT 05482
- 12. Shelburne Vineyard (44.3664, -73.2339) 6308 Shelburne Rd, Shelburne, VT 05482 (2 sites)
- 13. Sunrise Orchard (43.3180, -90.8311) about 1287 N Bingham St, Cornwall, VT 05753
- 14. UVM HREC (44.4307, -73.2043) 65 Green Mountain Drive, South Burlington, VT 05403
- 15. Vermont Technical College Orchard (43.9339, -72.6004) 124 Admin Drive, Randolph Center, VT 05061

Survey dates (traps set and/or collected)

Traps replaced every two weeks at each site (orchard or vineyard) from June to September, 2016. All traps were set out the first week of June and changed every 14 days; 6/15, 6/30, 7/15, 7/29, 8/15, 8/30, 9/15 and 930.

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

2016 Apple Commodity Survey

Survey	Scientific Name	Common Name	Trap Type	IPHIS Product ID	# of Traps	Lure Type	Lure Efficacy Period	Lure #
Apple Commodity Survey	Archips xylosteanus	Variegated Golden Tortrix Moth	Plastic/paper Wing	27	70	A. xylosteanus rubber septum	28	40
Apple Commodity Survey	Enarmonia formosana	Cherry Bark Tortrix	Paper delta (green/brown/orange 2 sticky sides)	109	70	E. formosana rubber septum	28	40
Apple Commodity Survey	Epiphyas postvittana	Light Brown Apple Moth	Jackson	5	70	E. postvittana rubber septum	42	30
Apple Commodity Survey	Adoxophyes orana	Summer Fruit Tortrix Moth	Paper delta (green/brown/orange 2 sticky sides)	110	70	A. orana rubber septum	84	20
Apple Commodity Survey	Grapholita funebrana	Plum Fruit Moth	Plastic wing	27	70	G. funebrana	28	40

10 sites, @ least 5 counties 5 traps for 5 pests per site 50 traps per cycle

2016 Grape Commodity Survey

Survey	Scientific Name	Common Name	Trap Type	IPHIS Product ID	# of Traps	Lure Type	Lure Efficacy Period	Lure #
Grape Commodity Survey	Adoxophyes orana	Summer Fruit Tortrix Moth	Paper delta (green/brown/orange 2 sticky sides)	110	56	A. orana rubber septum	84	16
Grape Commodity Survey	Epiphyas postvittana	Light Brown Apple Moth	Jackson	5	56	E. postvittana rubber septum	42	24
Grape Commodity Survey	Lobesia botrana	European grape vine moth	Paper delta (green/brown/orange 2 sticky sides)	108	56	L. botrana rubber septum	28	32
Grape Commodity Survey	Thaumatotibia leucotreta	False codling moth	wing trap (plastic/paper)	103	56	<i>T. leucotreta</i> rubber septum	56	24
Grape Commodity Survey	Cryptoblabes gnidiella	Honeydew moth	wing trap (plastic/paper)	27	56	<i>C. gnidiella</i> rubber septum	2	32

8 sites, @ least 4 counties 5 traps for 5 pests per site 40 traps per cycle