# 2019 Final Report - Tomato Commodity Survey for VT Agency of Ag, Food and Markets Ann Hazelrigg, Ph.D. and Gabriella Maia, M.S.



## 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: Addison, Chittenden, Franklin, Grand Isle, Lamoille, Rutland 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 (<u>https://pest.ceris.purdue.edu/</u>).

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

#### Farms (tomato) surveyed, summer 2019

Tomato						
Farm Name	VT County					
Dutchess Farm	Rutland					
Full Belly Farm	Addison					
Halverson Farm	Washington					
Hazelrigg Orchard/Farm	Chittenden					
Hudak Farm	Franklin					
Intervale Community Farm	Chittenden					
Jericho Settlers Farm	Chittenden					
Pomykala Farm	Grand Isle					
The Farm Between	Lamoille					
UVM HRC	Chittenden					

## Sites (coordinates and address)

- 1. Dutchess Farm (43.613110, -73.180964), 87 N Rd, Castleton, VT 05735
- 2. Full Belly Farm (44.265310, -73.133166) 686 Davis Road, Hinesburg, VT 05461
- 3. Halverson Farm (44.2282, -72.6180)138 White Rock Drive, Montpelier, VT 05602
- 4. Hazelrigg Orchard/Farm (44.432057, -73.123497) 206 Walker Hill Road, Williston, VT 05495
- 5. Hudak Farm (44.8491, 73.0884) 599 St Albans Road, Swanton, VT 05488
- 6. Intervale Community Farm (44.496496, -73.205442) 282 Intervale Road, Burlington, VT 05401
- 7. Jericho Settlers Farm (44.4645, -72.9782) 22 Barber Farm Road, Jericho, VT 05465
- 8. Pomykala Farm (44.7474, -73.2710) 197 E Shore North, Grand Isle, VT 05458
- 9. The Farm Between (44.6452, -72.8550) 3727 VT-15, Jeffersonville, VT 05464
- 10. 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 (field 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 Tomato Commodity Survey

Survey	Scientific Name	Common Name	Trap Туре	IPHIS Product ID	# of Traps	Lure Type	# Liners	# Lures	Lure Efficacy (days)	10 sites, 7 counties, 5 traps for 5 pests per site. 50 traps per cycle
Tomato Commodity Survey	Autographa gamma	Silver Y Moth	Plastic Bucket (unitrap)	18	10	<i>A. gamma</i> rubber septum	NA	40	28	
	Spodoptera littoralis	Egyptian Cottonworm	Plastic Bucket (unitrap)	18	10	S. littoralis laminate lure	NA	30	84	
	Helicoverpa armigera	Old World Bollworm	Plastic Bucket (unitrap)	18	10	H. armigera rubber septum	NA	40	28	
	Chrysodeixis chalcites	Golden Twin Spot Moth	Wing trap kit (plastic)	27	20	<i>C. chalcites</i> rubber septum	80	40	28	
	Tuta absoluta	Tomato Leaf Miner	Large white delta trap (plastic)	103	15	<i>T. absoluta</i> rubber septum	90	40	28	