

Spotted Lanternfly Grape Pesticides

Active Ingredient	Trade Name(s) Tested PSU	Recommendation Source (Tested)	Registration Number	Restriction and Labeling (see below)	Application Method	Gallo Allowed?	National/ Welches Allowed	Rate Per Acre	Max rate/ Acre/ Season	Target Life Stage Tested	Tested Longevity of Product Efficacy (days)	PHI (days)
Beta-Cyfluthrin	Baythroid XL	Penn State Vineyard Management Guide	264-840	Federal Restricted use NYS, PA 2EE for BMSB in Grapes	Foliar	No	Yes	3.2 fl oz	3.2 oz/acre per 14 day interval, 12.8 fl oz/ year	Adult	7	3
Bifenthrin	Bifenture EC	Penn State Vineyard Management Guide	70506-57	Federal Restricted use	Foliar	Yes	Yes	6.4 fl oz	12.8 fl oz/ year 6.4 fl oz Preharvest 6.4 fl oz Post harvest (24-C)	Adult	7	30
Bifenthrin	Brigade WSB Insecticide/ Miticide	Penn State Vineyard Management Guide + NYS IPM	279-3108	Federal Restricted Use 2(ee)	Foliar	Yes	Yes	16 oz	16 oz/ year	Adult	7	30
Bifenthrin	Brigade 2EC Insecticide/ Miticide	Penn State Vineyard Management Guide + NYS IPM	279-3313	Federal Restricted Use 2(ee)	Foliar	Yes	Yes	6.4 fl oz	12.8 fl oz/ year 6.4 fl oz Preharvest 6.4 fl oz Post harvest (24-C)	Adult	7	30
Bifenthrin	Sniper Helios	NYS IPM Approved, Should Be Similar to Penn State Tested.	34704-858	Federal Restricted Use 2(ee)	Foliar	Yes	Yes	N/A	6.4 oz/ year	Adult	Unknown	30
Bifenthrin + Imidacloprid	Swagger	NYS IPM Approved, Should Be Similar to Penn State Tested For Bifenthrin, Additional Component Unknown.	34704-1045	Federal Restricted Use 2(ee)	Foliar	Imidacloprid Soil Application Only	Yes	N/A	12.8 oz/ year	Adult	Unknown	30
Bifenthrin + Zeta- cypermethrin	Hero Insecticide	NYS IPM Approved, Should Be Similar to Penn State Tested For Bifenthrin, Additional Component Unknown.	279-3315	Federal Restricted Use 2(ee)	Foliar	Yes	Yes	N/A	10.3 oz/ year	Adult	Unknown	30
Carbaryl	Sevin XLR Plus	Penn State Vineyard Management Guide	61842-37	NR	Foliar	No	Yes	2 qt	10 quarts/ acre/ year.	Adult	0 (knockdown only)	7
Carbaryl	Loveland Carbaryl 4L Insecticide	Penn State Vineyard Management Guide	34704-447	NR	Foliar	No	Yes	3 qt	10 quarts per/ acre/ season. 5 applications max.	Adult	0 (knockdown only)	7
Carbaryl	Drexel Carbaryl 4L Insecticide	NYS IPM Guide, Should Be Similar to Penn State Tested	19713-49	NR 2(ee)	Foliar	No	Yes	N/A	10 quarts/ acre/ year.	Adult	Unknown	7

Dinotefuran	Venom	Penn State Vineyard Management Guide	59639-35	NR	Foliar	Yes	Yes	3 fl oz (foliar)	6 oz foliar, 7.5 oz soil *1 app per year soil, not more than 12oz/ acre total all apps	Adult	3-5	1 (foliar) 28 soil
Dinotefuran	Scorpion 35SL	Penn State Vineyard Management Guide	10163-317	NR	Foliar	Yes	Yes	5 oz (foliar)	10.5 oz foliar, 10.5 oz soil *1 app per year soil, 20.9 oz total per year	Adult	3-5	2 (foliar) 28 soil
Fenpropathrin	Danitol 2.4EC Spray	Penn State Vineyard Management Guide	59639-35	Federal Restricted Use 2(ee)	Foliar	No	Yes	21.33 fl oz	42-2/3 fl oz	Adult	21	21
Malathion	Malathion 8	Penn State Vineyard Management Guide	10163-21	NR	Foliar	No	No	1.88 pt	6 pts (calculated) 2 applications max, not less than 14 days between treatments	Adult	0 (knockdown only)	3
Paraffinic Oil	JMS Stylet Oil (organic version also available)	Penn State Vineyard Management Guide	65564-1	NR	Foliar	Yes	Yes	2% (max grape label is 2% not the 3% listed/ tested)	***Will temporarily remove the bloom on grapes. Repeat every 10-14 days for active insect control (not tested).	Eggs	N/a	14
Thiamethoxam	Actara	Penn State Vineyard Management Guide + NYS IPM	100-938	NYS, LI 2(ee)	Foliar	Soil Applications Only *(soil application not tested)	Yes	3.5 fl oz	7.0 oz not less than 14 days between applications	Adult	3-5	5
Zeta-cypermethrin	Mustang Maxx 0.8EC	Penn State Vineyard Management Guide + NYS IPM	279-3426	Federal Restricted Use 2(ee)	Foliar	Yes	Yes	4 fl oz	24 oz/ acre per year, not less than 7 days between applications	Adult	0 (knockdown only)	1
Zeta-cypermethrin	Cortes Maxx	Penn State Vineyard Management Guide + NYS IPM	91234-273	Federal Restricted use	Foliar	Yes	Yes	4 fl oz	24 oz/ acre per year, not less than 7 days between applications	(assumed same as Mustang Maxx)	(assumed same as Mustang Maxx)	1

REI (Hours)	Penn State Efficacy Rating	24 C	24 C Expiration	2EE Recommendation SLF Grapes	Notes
12	Excellent	No	N/A	No	No special needs labels yet for SLF.
12	Excellent	Post Harvest Additional Application: PA and OH Only	PA, OH 7/15/25	No	
12	Excellent	No	N/A	DE, MD, NJ, PA, VA, WV 8-16 oz/ acre	Agricultural; note there are 2 2(ee) SLF labels in NY; one only covers grapes, the other all three crops
12	Excellent	Post Harvest Additional Application: NY and VA Only	NY, VA 12/31/26	DE, MD, NJ, PA, VA, WV 6.4 oz/ acre	
12	Unknown	No	N/A	DE, MD, NJ, NY, PA, VA 3.2-6.4 oz/ acre. Max Bifenthrin 0.1lbs/ acre/ year	
12	Unknown	No	N/A	DE, MD, NJ, NY, PA, VA 7.6-12.8 oz/ acre, 14 day interval between applications, Maximum Bifenthrin 0.10lbs/acre/ year, Max Imidacloprid 0.1lbs/acre/ year	14 day interval between applications, Maximum Bifenthrin 0.30lbs/ year, Max Imidacloprid 0.2lbs/ year. 2EE Recommended 7.6-12.8oz/ application
12	Unknown	No	N/A	DE, MD, NJ, PA, VA, WV 5.0-10.3oz/ acre. 10.3oz/ acre/ year. Max usage tables when combining with zeta-cypermethrin or Bifenthrin.	7 day intervals between applications. , Maximum lbs zeta-cypermethrin 0.025lbs/ acre/ year, maximum Bifenthrin 0.075 lbs/ acre/ year.
6 days for girdling and cane turning, 2 days all other activities.	Good to Excellent	No	N/A	Not limited by state. 2 qts per acre. 5 aps per year max, not more than every 7 days.	
6 days for girdling and cane turning, 2 days all other activities.	Good to Excellent	No	N/A		
6 days for girdling and cane turning, 2 days all other activities	Good to Excellent	No	N/A		

12	Excellent	No	N/A	CT, DE, IN, MD, MA, MI, NJ, OH, PA, VA, WV 1-3 oz per acre foliar , interval between applications cannot be less then 14 days. 5-7.5 oz per acre soil, 1 soil ap per season, 12 oz total per season all methods.	Not Registered for use in NYS
12	Excellent	No	N/A	DE, MA, MD, NJ, PA, VA, WV Foliar- 5 oz per acre, not more than every 7 days, 10.25 oz foliar per year max. Soil 10.5 oz/ acre. 20.9 oz per acre max per season	Not Registered for use in NYS
24	Excellent	No	N/A	DE, IN, KY, MD, MI, NJ, NC, OH, PA, TN, VA, WV (NY Separate) 16-21-1/3 oz/ acre	Agricultural; note there are 2 2(ee) SLF labels in NY; the October 2018 label covers grapes, the Nov 2018 label all three crops. ADDITIONAL NEW YORK STATE RESTRICTIONS
72 hrs for girdling and tying, 24 hrs all other activities.	Excellent	No	N/A		
4	Good	No	N/A		
12	Excellent	No	N/A		Agricultural; No LI, NYS MAX APP RATE 0.188 LB/AI/ACRE/YEAR EXCEPT POME 0.172. NYS requires the crop to be on the label grape is not included for soil application to grape
12	Excellent	No	N/A	DE, MD, NJ, PA, VA, WV, (NY Separate) 4 oz/ acre, 24 oz per acre/ year not less then 7 days between application	Agricultural; NYS SPECIFIC BUFFER LANGUAGE - NO GOLF COURSES OR SOD FARMS ON LI; note there are two 2(ee) SLF labels in NY, one covers only grapes, the other all three crops
12	(assumed same as Mustang Maxx)	No	N/A	N/A	Not labeled for SLF

Updated 4/29/24: Andrew Holden, Megan Luke, Brian Walsh