

## FIFRA Section 2(ee) Recommendation for Control of Spotted Lanternfly



## EPA Reg. No. 2217-937

### Group 4A Insecticide

### FOR DISTRIBUTION AND USE ONLY IN THE STATES OF CT, DE, MD, NJ, PA, VA

**IMPORTANT NOTICE:** This recommendation is made as permitted under FIFRA Section 2(ee) and has not been submitted to or approved by the EPA. Follow all applicable directions, restrictions, and precautions on the product container label.

Use in New York state on Spotted Lanternfly is not controlled by this FIFRA Section 2(ee) Recommendation.

### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

#### **1. Soil Applications to Landscape Ornamental Plants (soil drench or soil injection)**

For systemic insect control on landscape ornamental plants in commercial, industrial and residential areas, parks, golf courses, athletic fields, and schools, as a soil drench or soil injection.

##### **Ornamental plants including:**

Bedding Plants, Shrubs, Ornamentals, Flowering Plants, Foliage Plants, Groundcovers, Evergreens, Ornamental Trees, Non-Bearing Fruit Trees, Non-Bearing Nut Trees, Non-Bearing Vines.

##### **Pests:**

Spotted Lanternfly

##### **Trees and Shrubs:**

**Shrubs:** 0.18 to 0.4 fl.oz. per foot of height (2 to 4 fl.oz. per 10 feet of height)

**Trees:** Small Trees (Less than 24 inches diameter at breast height) 0.18 to 0.8 fl.oz. per inch diameter at breast height (DBH). Large Trees (24 inches diameter or greater at breast height) 0.4 to 0.8 fl.oz. per inch diameter at breast height (DBH).

For multi-stem trees, calculate rate on the total cumulative inches of diameter of all stems at breast height. For optimal control, apply early in the plant's annual growing cycle and keep soil moist for at least 7 days after application

**Restrictions:**

- Only apply to moist soil. Do not apply to dry, saturated or frozen soil. Heavy rainfall or inadequate irrigation immediately following application may decrease performance.

Use higher labeled rates for severe pest infestations and broadleaf evergreens with dense foliage (i.e. hollies)

**Soil Drench:** Mix the required amount of Zylam Liquid Systemic Insecticide in water and uniformly apply to soil around base of shrub or tree. Pull back mulch, rock or gravel before drenching to allow for pooling at the base. For optimal performance apply at least 1 quart of mixed solution per foot of height or inch of trunk diameter. **(example: For a tree with a 12 inch DBH apply at least 12 quarts (or 3 gallons) of mixed solution.)**

If drench volumes must fall below 1 quart of mixed solution per foot of height or inch of trunk diameter, apply 1/2 inch of irrigation immediately after application to move the product into the root zone. Allow soil to remain moist for at least 7 days after application.

**Soil Injection:** Mix the required amount of Zylam Liquid Systemic Insecticide in water and make at least 4 injections per shrub or tree with a low-pressure applicator. Use same amount of mixed solution per treatment hole. Injections can be made using the following methods:

- **Grid system** – Space injections on a 2.5 ft. center extending to drip line
- **Circle System** – Make injections in concentric circles extending inward from the drip line.
- **Basal System** – Space injection evenly around trunk no more than 12 inches out from the base.

For optimal performance inject at least 1 quart of mixed solutions per foot of height or inch of trunk diameter **(example: For a tree with a 12 inch DBH inject at least 12 quarts (or 3 gallons) of mixed solution.)**

<b>Shrubs: Soil Application Rates (soil drench or soil injection)</b> 0.18 to 0.4 fl.oz. per foot of shrub height [1.8 to 4.0 fl.oz. per 10 feet of shrub height]			
<b>Shrub Height</b>	<b>Low Rate</b>	<b>Medium Rate</b>	<b>High Rate</b>
1 ft	0.18 fl.oz. Zylam Liquid Systemic Insecticide + 1 qt water	0.3 fl.oz. Zylam Liquid Systemic Insecticide + 1 qt water	0.4 fl.oz. Zylam Liquid Systemic Insecticide + 1 qt water
2 ft	0.36 fl.oz. Zylam Liquid Systemic Insecticide + 2 qt water	0.6 fl.oz. Zylam Liquid Systemic Insecticide + 2 qt water	0.8 fl.oz. Zylam Liquid Systemic Insecticide + 2 qt water
4 ft	0.72 fl.oz. Zylam Liquid Systemic Insecticide + 1 gal water	1.2 fl.oz. Zylam Liquid Systemic Insecticide + 1 gal water	1.6 fl.oz. Zylam Liquid Systemic Insecticide + 1 gal water
6 ft	1.08 fl.oz. Zylam Liquid Systemic Insecticide + 1.5 gal water	1.8 fl.oz. Zylam Liquid Systemic Insecticide + 1.5 gal water	2.4 fl.oz. Zylam Liquid Systemic Insecticide + 1.5 gal water
8 ft	1.44 fl.oz. Zylam Liquid Systemic Insecticide + 2 gal water	2.4 fl.oz. Zylam Liquid Systemic Insecticide + 2 gal water	3.2 fl.oz. Zylam Liquid Systemic Insecticide + 2 gal water
10 ft	1.8 fl.oz. Zylam Liquid Systemic Insecticide + 2.5 gal water	3.0 fl.oz. Zylam Liquid Systemic Insecticide + 2.5 gal water	4.0 fl.oz. Zylam Liquid Systemic Insecticide + 2.5 gal water

<b>Small Trees: Soil Application Rates (soil drench or soil injection)</b> 0.18 to 0.8 fl.oz. per inch diameter at breast height (DBH) [1.8 to 8.0 fl.oz. per 10 inches diameter at breast height (DBH)]			
<b>Tree Size</b>	<b>Low Rate</b>	<b>Medium Rate</b>	<b>High Rate</b>
1 inch DBH	0.18 fl.oz. Zylam Liquid Systemic Insecticide + 1 qt water	0.5 fl.oz. Zylam Liquid Systemic Insecticide + 1 qt water	0.8 fl.oz. Zylam Liquid Systemic Insecticide + 1 qt water
2 inch DBH	0.36 fl.oz. Zylam Liquid Systemic Insecticide + 2 qt water	1.0 fl.oz. Zylam Liquid Systemic Insecticide + 2 qt water	1.6 fl.oz. Zylam Liquid Systemic Insecticide + 2 qt water
4 inch DBH	0.72 fl.oz. Zylam Liquid Systemic Insecticide + 1 gal water	2.0 fl.oz. Zylam Liquid Systemic Insecticide + 1 gal water	3.2 fl.oz. Zylam Liquid Systemic Insecticide + 1 gal water
6 inch DBH	1.08 fl.oz. Zylam Liquid Systemic Insecticide + 1.5 gal water	3.0 fl.oz. Zylam Liquid Systemic Insecticide + 1.5 gal water	4.8 fl.oz. Zylam Liquid Systemic Insecticide + 1.5 gal water
8 inch DBH	1.44 fl.oz. Zylam Liquid Systemic Insecticide + 2 gal water	4.0 fl.oz. Zylam Liquid Systemic Insecticide + 2 gal water	6.4 fl.oz. Zylam Liquid Systemic Insecticide + 2 gal water

<b>Small Trees: Soil Application Rates (soil drench or soil injection)</b> 0.18 to 0.8 fl.oz. per inch diameter at breast height (DBH) [1.8 to 8.0 fl.oz. per 10 inches diameter at breast height (DBH)]			
<b>Tree Size</b>	<b>Low Rate</b>	<b>Medium Rate</b>	<b>High Rate</b>
10 inch DBH	1.8 fl.oz. Zylam Liquid Systemic Insecticide + 2.5 gal water	5.0 fl.oz. Zylam Liquid Systemic Insecticide + 2.5 gal water	8.0 fl.oz. Zylam Liquid Systemic Insecticide + 2.5 gal water
20 inch DBH	3.6 fl.oz. Zylam Liquid Systemic Insecticide + 5 gal water	10.0 fl.oz. Zylam Liquid Systemic Insecticide + 5 gal water	16.0 fl.oz. Zylam Liquid Systemic Insecticide + 5 gal water

<b>Large Trees: Soil Application Rates (soil drench or soil injection)</b> 0.4 to 0.8 fl.oz. per inch diameter at breast height [4.0 to 8.0 fl.oz. per 10 inches diameter at breast height (DBH)]			
<b>Tree Size</b>	<b>Low Rate</b>	<b>Medium Rate</b>	<b>High Rate</b>
24 inch DBH	9.6 fl.oz. Zylam Liquid Systemic Insecticide + 6 gal water	14.4 fl.oz. Zylam Liquid Systemic Insecticide + 6 gal water	19.2 fl.oz. Zylam Liquid Systemic Insecticide + 6 gal water
25 inch DBH	10 fl.oz. Zylam Liquid Systemic Insecticide + 6.25 gal water	15 fl.oz. Zylam Liquid Systemic Insecticide + 6.25 gal water	20 fl.oz. Zylam Liquid Systemic Insecticide + 6.25 gal water
30 inch DBH	12 fl.oz. Zylam Liquid Systemic Insecticide + 7.5 gal water	18 fl.oz. Zylam Liquid Systemic Insecticide + 7.5 gal water	24 fl.oz. Zylam Liquid Systemic Insecticide + 7.5 gal water
35 inch DBH	14 fl.oz. Zylam Liquid Systemic Insecticide + 8.75 gal water	21 fl.oz. Zylam Liquid Systemic Insecticide + 8.75 gal water	28 fl.oz. Zylam Liquid Systemic Insecticide + 8.75 gal water
40 inch DBH	16 fl.oz. Zylam Liquid Systemic Insecticide + 10 gal water	24 fl.oz. Zylam Liquid Systemic Insecticide + 10 gal water	32 fl.oz. Zylam Liquid Systemic Insecticide + 10 gal water
45 inch DBH	18 fl.oz. Zylam Liquid Systemic Insecticide + 11.25 gal water	27 fl.oz. Zylam Liquid Systemic Insecticide + 11.25 gal water	36 fl.oz. Zylam Liquid Systemic Insecticide + 11.25 gal water
50 inch DBH	20 fl.oz. Zylam Liquid Systemic Insecticide + 12.5 gal water	30 fl.oz. Zylam Liquid Systemic Insecticide + 12.5 gal water	40 fl.oz. Zylam Liquid Systemic Insecticide + 12.5 gal water

## 2. Bark Banding Applications to Landscape Ornamental Plants

For systemic insect control on landscape trees and shrubs in commercial, industrial and residential areas, parks, golf courses, athletic fields, and schools, when applied as a trunk spray.

**Product Rate:** Add 21.6 to 43.2 fl.oz. of Zylam Liquid Systemic Insecticide plus 1.0 fl.oz. of 100% organosilicone surfactant to enough water to make 1 gallon of mixed solution. 1 gallon of mixed solution treats 65 to 85 inches of tree diameter when measuring diameter at breast height (DBH).

When sprayed on the trunk, Zylam Liquid Systemic Insecticide will be absorbed through the bark and into the vascular system, and then transported throughout the tree. Speed of control will be dependent on tree size, tree health, environmental conditions and how actively pests are feeding.

Spray bark on root flare (buttress roots) and on trunk between soil surface and 4 to 5 feet above the soil surface. Adjust nozzle to uniformly distribute spray over the entire circumference of the tree trunk and buttress roots. Wet bark just to the point of saturation and run off onto soil.

Apply with a low volume sprayer operated at 10 to 20 PSI to prevent tree damage, bounce back and drift.

For optimal control, apply to actively growing trees, and time application that Zylam Liquid Systemic Insecticide has had time to move to insect feeding sites at when target life stage is present.

Control may be less effective in trees with thick bark, and at times when trees are not actively growing or transpiring.

### **Ornamental plants including:**

Shrubs, Ornamental Trees, Non-Bearing Fruit Trees, Non-Bearing Nut Trees.

### **Pests**

Spotted Lanternfly

**Restrictions:**

- Do not apply to wet bark, during rainfall or if rain is expected within 12 hours.
- Do not apply more than 79 fl.oz. of Zylam Liquid Systemic Insecticide per acre per year.
- Do not make more than one application per year.

<b>Trees and Shrubs: Bark Banding Rates for Landscape Ornamentals – To prepare less than 1 gal of mixed solution (based on 1 gallon of mixed solution covering 85 inches DBH).</b>			
<b>Trunk DBH</b>	<b>Low Rate</b>	<b>Medium rate</b>	<b>High Rate</b>
1 inch DBH	0.25 fl.oz. Zylam Liquid Systemic Insecticide + 0.01 fl.oz. organosilicone surfactant + 1.24 fl.oz water	0.4 fl.oz. Zylam Liquid Systemic Insecticide + 0.01 fl.oz. organosilicone surfactant + 1.1 fl.oz water	0.51 fl.oz. Zylam Liquid Systemic Insecticide + 0.01 fl.oz. organosilicone surfactant + 0.99 fl.oz water
2 inch DBH	0.51 fl.oz. Zylam Liquid Systemic Insecticide + 0.02 fl.oz. organosilicone surfactant + 2.48 fl.oz. water	0.8 fl.oz. Zylam Liquid Systemic Insecticide + 0.02 fl.oz. organosilicone surfactant + 2.2 fl.oz. water	1.02 fl.oz. Zylam Liquid Systemic Insecticide + 0.02 fl.oz. organosilicone surfactant + 1.97 fl.oz. water
4 inch DBH	1.02 fl.oz. Zylam Liquid Systemic Insecticide + 0.05 fl.oz. organosilicone surfactant + 4.96 fl.oz. water	1.5 fl.oz. Zylam Liquid Systemic Insecticide + 0.05 fl.oz. organosilicone surfactant + 4.5 fl.oz. water	2.03 fl.oz. Zylam Liquid Systemic Insecticide + 0.05 fl.oz. organosilicone surfactant + 3.94 fl.oz. water
6 inch DBH	1.52 fl.oz. Zylam Liquid Systemic Insecticide + 0.07 fl.oz. organosilicone surfactant + 7.4 fl.oz. water	2.3 fl.oz. Zylam Liquid Systemic Insecticide + 0.07 fl.oz. organosilicone surfactant + 6.7 fl.oz. water	3.05 fl.oz. Zylam Liquid Systemic Insecticide + 0.07 fl.oz. organosilicone surfactant + 5.92 fl.oz. water
8 inch DBH	2.03 fl.oz. Zylam Liquid Systemic Insecticide + 0.09 fl.oz. organosilicone surfactant + 9.9 fl.oz. water	3.0 fl.oz. Zylam Liquid Systemic Insecticide + 0.09 fl.oz. organosilicone surfactant + 8.9 fl.oz. water	4.07 fl.oz. Zylam Liquid Systemic Insecticide + 0.09 fl.oz. organosilicone surfactant + 7.89 fl.oz. water
10 inch DBH	2.54 fl.oz. Zylam Liquid Systemic Insecticide + 0.12 fl.oz. organosilicone surfactant + 12.4 fl.oz. water	3.8 fl.oz. Zylam Liquid Systemic Insecticide + 0.12 fl.oz. organosilicone surfactant + 11.1 fl.oz. water	5.08 fl.oz. Zylam Liquid Systemic Insecticide + 0.12 fl.oz. organosilicone surfactant + 9.86 fl.oz. water

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**Document Control Information**

1. **Unique Label Identifier:** 002217-00937.20180104.2(ee)
2. **Reason for Issue:** new FIFRA Section 2(ee) Recommendation

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