

# Safari® INSECTICIDE

## SAY SO LONG TO SPOTTED LANTERNFLIES.



### THE SPOTTED LANTERNFLY: WHAT YOU NEED TO KNOW

The spotted lanternfly – native to China, Vietnam and India – is believed to have arrived in the United States with a shipment of landscaping stones in 2014. Since their arrival in Pennsylvania, they have spread to several states including NJ, DE, MD and VA. This damaging insect claims host to more than 70 different plant species, such as fruit, ornamental and landscape trees (including pine, oak, walnut, poplar, willow, maple and sycamore trees), as well as vegetables, herbs and vines.

The spotted lanternfly poses a threat to grape, tree-fruit, hardwood, nursery and landscape industries, which annually generate crops and products worth billions. High-value ornamentals in landscapes settings are also at risk. As the lanternfly feeds, they excrete a sugary substance which promotes growth of a sooty mold. Over time, this can weaken and kill plants or trees.

Currently, PA, NJ, DE, MD and VA are under quarantine restrictions.

### THE LIFE CYCLE OF A SPOTTED LANTERNFLY

- Spotted lanternfly females prefer to lay their eggs on the tree-of-heaven (Ailanthus), but will lay their eggs on any flat vertical surface, including other trees, stones, vehicles (moving them into other areas), outdoor furniture and many others.
- Eggs are typically laid September through December.
- Eggs will normally survive winter and hatch 30 to 50 nymphs come late April and early May.
- The adult stage is reached beginning late July.

| STAGE    | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC |
|----------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|
| A. EGG   |     |     |     |     |     |      |      |     |      |     |     |     |
| B. NYMPH |     |     |     |     |     |      |      |     |      |     |     |     |
| C. ADULT |     |     |     |     |     |      |      |     |      |     |     |     |



Photo A: Pennsylvania Department of Agriculture, Bugwood.org  
 Photo B: Eric R. Day, Virginia Polytechnic Institute and State University, Bugwood.org  
 Photo C: Kenneth R. Law, USDA APHIS PPQ, Bugwood.org

## SPOTTED LANTERNFLY I.D.



- A. 1st to 4th instar nymphs and adult female with wings spread out
- B. Egg masses in oothecae (egg cases) covered in a waxy deposit
- C. Lateral view of a resting adult
- D. Adult congregation on a tree trunk and plant sap oozing from damaged area

Photo A, B and D: Lawrence Barringer, Pennsylvania Department of Agriculture  
Photo C: Kenneth R. Law, USDA APHIS PPQ, Bugwood.org

## COMBAT THE SPOTTED LANTERNFLY

Combating the spotted lanternfly will require diligence from everyone. Important treatment protocols include stopping the spread from quarantine areas (i.e. on vehicles or fire wood), host removal, scraping and removal of eggs as well as chemical control.

### NUFARM OFFERS A SPOTTED LANTERNFLY CONTROL SOLUTION

Safari Insecticide can be used for spotted lanternfly control in container and field grown ornamentals, outdoor landscapes, tree plantations, and forests and wooded areas. It can be applied as a foliar spray, soil drench, soil injection, or basal trunk spray. Optimal application timing is from mid-May to August.

- Super-systemic activity results in faster uptake and control than less systemic products
- Can be applied after spring leaf-out, which allows assessment of tree health prior to application
- Unmatched speed, ease and flexibility of application

| APPLICATION METHOD                          | APPLICATION RATE // Do not apply more than 2.7 lbs of Safari per A/year                                                                                                                                                                                            | APPLICATION TIPS // Optimal application timing: mid-May to August                                                                                                                                                                                                                                                                        |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FOLIAR SPRAY                                | 8 - 16 oz/A (0.5 - 1 tsp/gal for small areas)                                                                                                                                                                                                                      | 100 gals of spray mix will treat 20,000 sq ft when using a typical high volume sprayer<br>If using a low volume sprayer, adjust concentration to apply the same amount of product per unit area                                                                                                                                          |
| BASAL TRUNK SPRAY<br>TREES AND LARGE SHRUBS | 12 - 24 oz/gal of water<br><b>APPLICATION VOLUME:</b><br>1 gal of trunk spray solution per 65 - 85 inches of trunk diameter (1.5 - 2 fl oz/inch of trunk diameter)                                                                                                 | Uniformly spray lower 5 ft of trunk until bark is wet and spray is just beginning to run off<br>Surfactant not required (NOTE: Some surfactants can bleach tree bark)<br>Operate sprayer at less than 20 PSI to minimize drift and bounce back of spray droplets<br>Avoid application to wet bark or if rain is expected within 12 hours |
| SOIL INJECTION                              | <b>TREES LESS THAN 24" DIAMETER AT BREAST HEIGHT (DBH):</b><br>1.05 - 4.2 oz/10 inches of trunk DBH<br><b>TREES 24" DBH OR GREATER:</b><br>2.1 - 4.2 oz/10 inches of trunk DBH<br><b>APPLICATION VOLUME:</b><br>1 - 32 fl oz dilute solution/height of tree or DBH | Make one soil injection/inch DBH and evenly space injection sites within 24" of base of trunk                                                                                                                                                                                                                                            |
| SOIL DRENCH                                 | 1 - 2.1 oz per 10 ft of height<br>1 - 4 pt of drench solutions per foot of height or inch of trunk diameter                                                                                                                                                        | Pour drench solution on soil evenly around trunk within 24" of base of trunk                                                                                                                                                                                                                                                             |



[nufarm.com/usturf](http://nufarm.com/usturf)

For specific application rates, directions, mixing instructions and precautions, read the product label. Please visit [www.nufarm.com/usturf](http://www.nufarm.com/usturf) to download a full label.

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