

Spotted lanternfly



PHOTO: Holly Ragusa, PA Dept. of Agriculture

SCIENTIFIC NAME: *Lycorma delicatula*

Information: The spotted lanternfly (**SLF**) is an invasive insect that has spread throughout southeastern Pennsylvania. It was first identified in Berks County in 2014. This insect presents a significant threat to the agriculture industry.

Description: An invasive species; 1" long, grey forewing with black spots, hind wings have patches of red and black with a white band. Abdomen is yellow with black bands. Larva are black with white spots and develop red patches as they mature.

Signs and Symptoms : Grey or black weeping wounds present on tree trunks, sap will attract other insects; eggs are laid on host trees and other smooth surfaces in late fall. Host Plants include; tree of heaven, willow, maple, poplar, plums, cherries, peaches, nectarines, apricots, almonds, apples, pine, grape (vine), etc.

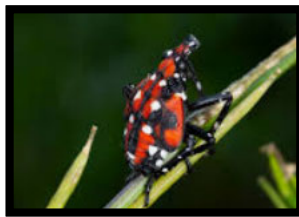
Standard Management Procedures: This document outlines best management practices and general control guidelines. Always read and follow the label for any herbicide or insecticide recommended in these procedures. Also note that you can find the most current information about the **SLF** and control recommendations from Penn State Extension at <https://extension.psue.edu/spotted-laternly>

Spotted lanternfly

I. Proper Identification



Egg Masses



Nymph



Adult

II. Removing and Destroying Eggs: During the Winter/Early Spring (Typically January-Early May), egg masses are the predominate life stage present. Fresh egg masses are lighter in color than older masses. To properly destroy and remove egg masses, you will need a scraper (card or other flat object), bag or container for egg mass collection, alcohol or hand sanitizer.

- a. Locate egg masses on tree bark or other flat surfaces.
- b. Press firmly and scrape masses from surface.
- c. Scrape masses into bag that contains a small amount of alcohol or hand sanitizer.
- d. When collection is complete, seal bag or container.
- e. Coat all eggs with alcohol or hand sanitizer.
- f. Double-bag and dispose of scrapings.

How-To Video: <https://extension.psu.edu/how-to-remove-spotted-lanternfly-eggs>

For the most current information:

Penn State Extension

<https://extension.psu.edu/spotted-lanternfly>

Spotted lanternfly

Tree Banding Instructions Provided by: Catchmaster®

III. Trap and Destroy Nymphs: During Spring and Summer (May-August), nymphs are the predominate life stage present. Banding trees with sticky tape can capture and kill spotted lanternfly nymphs and adults. Items needed: Tree Banding Glue, 3/16 - 1/4" slotted spreader, batting/ under-wrap material of choice, straight-edge razor, protective gloves, Plastic pallet wrap, flat head screwdriver (to open glue), Optional Catchmaster® SLF attractant, trash bag, staple gun or thumbtacks. Mineral oil or spirits for cleanup.

- a. Install tree bands at about eye level for ease of installation and removal and to keep pets and children from interacting with the bands.
- b. Install an under- wrap to accommodate for the rough bark surface to minimize nymph penetration under the band. We have used many types of material for this ranging from fiberglass insulation strips and foam bands to recycled pallet wrap tightly twisted into a rope. This is installed on the tree with a staple gun or thumb tacks.
- c. Tightly wrap over the installed band using pallet wrap. Early in the season tree bands can be relatively narrow ranging from 6 - 10" wide to minimize waste. When the bands become filled with nymphs they should be replaced. Later in the year, when the adults predominate the population band width should be increased to anywhere from 12-20 " wide to facilitate the capture of flying and hopping adults.
- d. Apply a thin layer of tree-banding adhesive to the tree band being careful to contain the glue on the plastic substrate with a 3/16 -1/4" slotted spreader. This will insure a thin even layer of adhesive on the band. Attach optional SLF attractant to the band with a tack or staple in the center of the band. When the band becomes filled with insects carefully slit down the side
- e. With the razor and roll it onto itself to contain the pests. Dispose of used tree band in the trash.



Materials Needed



Proper Banding

For the most current information:

Penn State Extension

<https://extension.psu.edu/spotted-lanternfly>

Spotted lanternfly

IV. Treat host trees with Systemic Insecticide: During Spring and Summer (May-August), nymphs are the predominate life stage present. Treating with systemic insecticides during this time can help control SLF populations. Systemic insecticides are absorbed by the plant and control insects feeding on it. **YOU MUST READ AND FOLLOW THE LABEL.** This increases your safety, the safety of the environment, and the efficacy of the insecticide. (Examples of systemic active ingredients include: imidacloprid, dinotefuran).

V. Treat with Contact Insecticides: During Summer and Early Fall, Contact Insecticides may be effective for controlling nymph and adult SLF. **YOU MUST READ AND FOLLOW THE LABEL.** This increases your safety, the safety of the environment, and the efficacy of the insecticide. (Examples of active ingredients include: bifenthrin, β -Cyfluthrin, deltamethrin, acetamiprid, etc.)

For the most current information:

Penn State Extension

<https://extension.psu.edu/spotted-lanternfly>

Spotted lanternfly

VI. Reduce Host Tree Populations: Year round, host plant reduction can be beneficial for SLF population reduction. Although SLF will feed on a variety of plant hosts (see page 1 for examples), they prefer the tree of heaven.

For instructions on various ways to control the tree of heaven, refer to:

<http://www.co.berks.pa.us/Muni/Rockland/Documents/SL%20-%20Guidelines%20for%20the%20Control%20of%20SL.pdf>.

**It is the responsibility of the applicator to obtain and maintain proper licenses required to apply herbicides.

**NOTE: PDA DOES NOT RECOMMEND TREE OF HEAVEN REMOVAL
UNLESS ACCOMPANIED WITH AN HERBICIDE APPLICATION**

For the most current information:

Penn State Extension

<https://extension.psu.edu/spotted-lanternfly>

Spotted lanternfly

- ALWAYS READ AND FOLLOW PESTICIDE LABELS.
- It is the responsibility of the applicator to obtain and maintain proper licenses required to apply pesticides.
- WHEN USING INSECTICIDES ON EDIBLE CROPS: It is especially important to follow directions for chemical application and timing from harvest as stated on the label.
- PA: Pennsylvania law requires that pesticide labels list the site where a pesticide may be used. In Pennsylvania, insecticide labels do not have to specifically list the target pest (Spotted lanternfly).

For the most current information:

Penn State Extension

<https://extension.psu.edu/spotted-lanternfly>