



Controlling Infestations of spotted lanternfly In West Virginia

The spotted lanternfly (*Lycorma delicatula*, SLF) is an invasive insect that is spreading quickly in West Virginia. Native to southern Asia, spotted lanternfly was first detected in the United States in 2014. Fortunately, there are several practices that landowners can complete to control the populations of this pest on their properties.

spotted lanternfly egg masses



1st -3rd instar nymph of spotted lanternfly

Background

The spotted lanternfly has the potential to infest and damage many species of shrubs, trees, and vines in West Virginia. However, the preferred host of the spotted lanternfly is also an invasive plant species called tree-of-heaven (*Ailanthus altissima*).

Management of Spotted Lanternfly Infestations

Since the invasive tree-of-heaven is the preferred host of the spotted lanternfly, removing these plants from your property will help to decrease numbers of spotted lanternfly. Although the tree-of-heaven often exists as small trees and sprouts, it can grow to very large sizes, with heights of 70 to 80 feet not uncommon in West Virginia. Because of a similar appearance, the tree-of-heaven is often mistaken with black walnut (*Juglans nigra*), butternut (*Juglans cinerea*), and several species of sumac. It is important to be sure that you have tree-of-heaven before removal as black walnut, butternut, and sumac are native species that offer many ecological benefits and shouldn't be removed to decrease populations of spotted lanternfly.

Tree-of-heaven is best controlled by applying an herbicide. A hatchet or similar cutting tool is used to cut frills into the tree stem. The frills should be proximately 1 inch deep and spaced 1 to 2 inches apart in a ring around the tree stem. Herbicides may also be applied directly to the bark of the tree from the ground level to approximately 18 inches. Herbicide applications should be made between early July and the middle of October. Herbicides that may be used include Roundup and Pathfinder II. Please be sure to read the label carefully before the application of any pesticide.

bugbusters@wvda.us or 304-558-2212.

Management of SLF Continued

When controlling tree-of-heaven, it is important to remember that simply cutting the plants at ground level will only cause them to produce copious amounts of root and stump sprouts. Thus, the proper application of herbicide following the product label is a vital part of controlling tree-of-heaven.

If you have large shade trees, ornamental trees, or even tree-of-heaven that you are not able to remove, then systemic insecticides that contain the active ingredients Dinotefuran or imidacloprid can be used. These insecticides may be applied by the homeowner to the base of a tree by using a sprayer or applied as a soil drench around the root flare of the tree. Be sure to read the product label carefully to ensure proper application and efficient kill of the spotted lanternfly.

If you have spotted lanternfly that are swarming on bases of your shade trees, ornamental trees, and structures such as barns, an application of a contact insecticide is recommended. A insecticide that contains the active ingredient bifenthrin, carbaryl, or acetamiprid is advised. Again, be sure to read the product label thoroughly to ensure proper application and efficacy.

It is important that you read all pesticide labels very carefully before applying to food crops such as grape vines. The label will state whether or not the product is safe to use on food crops. If the label permits use on food crops, preharvest intervals that will tell you the duration of time that should pass between insecticide application and harvest will also be stated.

See a Pest?

If you have a large infestation of spotted lanternfly, the West Virginia Department of Agriculture would like to know about it. To report your infestation, send an e-mail to the West Virginia Department of Agriculture invasive species detection account at: bugbusters@wvda.us or 304-558-2212.



Scraping/Smashing Management Practice

Another practice important for the control of spotted lanternfly is egg mass scraping/smashing. This task can be completed in November up to whenever the insects hatch from the egg masses. A variety of tools commonly found around the average garage can be used to scrape and smash the egg masses. Since each egg mass contains 30 to 50 eggs, this is a very efficient and chemical free method to reduce numbers of spotted lanternfly. To destroy the egg mass, simply use a sharp flat object such as a putty knife or a plastic bucket opener to scrape/roll over the egg mass in a top-down direction. If you scrape bottom up, then you risk removing the eggs intact where they may drop onto the ground and hatch in spring. The bottom line is that you want to smash or “break” the eggs in the egg masses.

