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DEPARTMENT OF AGRICULTURE

PennState Extension

How to Eliminate or Control Spotted Lanternfly Adults:

If you find Spotted Lanternflies in a municipality where they are known to exist, you should try to kill them.

The most effective way to eliminate these insects is to disrupt their favorite food and hang-out. In late summer and fall, Spotted Lanternflies prefer feeding on *Ailanthus altissima*, commonly known as the "Tree of Heaven." They can be found feeding on other plants and trees, but *Ailanthus altissima* is their favorite host. Here's an excellent resource to help you identify the tree:
https://pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/420/420-322/420-322_pdf.pdf

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If you have *Ailanthus* on your property: please consider reducing the number of *Ailanthus* trees, then treat remaining "trap trees" with insecticides. This is a longer-lasting solution than simply spraying insects you see.
More detail about this process can be found at the following websites:

http://www.agriculture.pa.gov/Protect/PlantIndustry/spotted_lanternfly/Documents/What%20to%20do%20if%20you%20find%20spotted%20lanternfly%20on%20your%20property%20fact%20sheet%20February%202017.pdf

http://www.agriculture.pa.gov/Protect/PlantIndustry/spotted_lanternfly/Documents/Spotted%20Lanternfly%20%20Property%20Management.pdf

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If you want to kill Spotted Lanternflies without controlling *Ailanthus*:

When there are only a few insects, you can kill spotted lanternflies by swatting or crushing them. For large populations, two kinds of insecticides are widely available that will kill Spotted Lanternfly adults. **Contact insecticides** kill spotted lanternflies when the chemical contacts the insect directly. **Systemic insecticides** are absorbed by the tree and kill insects feeding on it. **ALL** insecticides must be used as directed on the label. Take the time to read the label carefully and follow the directions. This increases your safety, the safety of the environment, and the effectiveness of the insecticide.

Pennsylvania law requires that pesticide labels list the site where a pesticide (such as an insecticide) may be used. In Pennsylvania, insecticide labels do not have to specifically list the targeted insect. There are insecticides labeled for use on ornamental trees and around buildings. These products are legal to use on the sites listed in order to control Spotted Lanternflies in Pennsylvania.

Penn State Extension is currently testing to determine which insecticides are most effective in controlling adult spotted lanternflies. Preliminary results show insecticides with the active ingredients ***dinotefuran, imidacloprid, carbaryl, and bifenthrin*** are effective at controlling the spotted lanternfly. Neem oil and insecticidal soap provided some control, but results varied, and insects sometimes took several days to die.

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Examples listed below are some of the available insecticide products containing the most effective ingredients studied (***dinotefuran, imidacloprid, carbaryl, and bifenthrin)***.

EXAMPLES OF PRODUCTS CONTAINING INSECTICIDES LABELED FOR USE IN LANDSCAPES AND GARDENS:

Contact insecticides (bifenthrin, carbaryl) - apply when adult insects are present:

AVALON INSECTICIDE
BIFEN 7.9F SELECT
FERTI-LOME BROAD SPECTRUM INSECTICIDE
FLEE READY-TO-USE YARD SPRAY
HOME MD MAXIMUM DEFENSE YARD CONCENTRATE
LESCO CROSSCHECK PLUS MULTI INSECTICIDE
MAXXTHOR SG
ORTHO MAX PRO
SEVIN
TALSTAR SELECT INSECTICIDE
UP-STAR GOLD INSECTICIDE

Systemic insecticides (imidacloprid, dinotefuran) – most effective when applied in spring and summer, before adults build up:

BAYER ADVANCED 12 MONTH TREE & SHRUB INSECT CONTROL
BONIDE ANNUAL TREE AND SHRUB INSECT CONTROL WITH SYSTEMAXX
COMPARE-N-SAVE SYSTEMIC TREE & SHRUB INSECT DRENCH
GREEN LIGHT TREE & SHRUB INSECT CONTROL WITH SAFARI
MONTEREY ONCE A YEAR INSECT CONTROL II
ORTHO BUG B GON YEAR-LONG TREE & SHRUB INSECT CONTROL CONCENTRATE
SPECTRACIDE TREE & SHRUB INSECT CONTROL
TRANSTECT 70 WSP INSECTICIDE
VENOM INSECTICIDE
ZYLAM LIQUID SYSTEMIC INSECTICIDE

EXAMPLES OF PRODUCTS CONTAINING INSECTICIDES FOR USE ON VEGETABLES, FRUIT, BERRIES AND GRAPES:

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.

AGWAY COMPLETE FRUIT TREE SPRAY
BONIDE COMPLETE FRUIT TREE SPRAY LIQUID
BONIDE EIGHT INSECT CONTROL FLOWER &VEGETABLE ABOVE AND BELOW SOIL INSECT GRANULES
HI-YIELD VEGETABLE & ORNAMENTAL INSECT CONTROL GRANULES
SEVIN
VEGETABLE GARDEN SOIL INSECTICIDE

The products listed above are registered for use in specific settings. Read the pesticide label and follow the directions, including application rates, methods, and appropriate protective clothing and equipment.

THE LIST IS PROVIDED BASED ON CURRENT PRODUCT REGISTRATIONS. THIS IS NOT AN ENDORSEMENT OF ANY PRODUCT OR PESTICIDE PRODUCER. THIS IS NOT A COMPLETE LIST OF POSSIBLE LABELED PRODUCTS OR BRANDS.

THESE INSECTICIDES HAVE NOT ALL BEEN TESTED AGAINST SPOTTED LANTERNFLY SPECIFICALLY, AND ADDITIONAL EXPERIMENTS ARE NEEDED TO DETERMINE THEIR EFFICACY.

September 2017