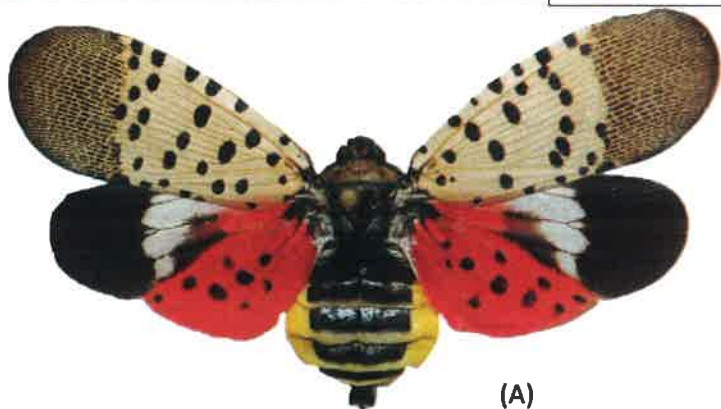


Pest Alert

Please do not disturb the brown bands. We'll be back every 2 weeks.

BETSY-717-303-6987

TERRY~717480-3339



Spotted Lanternfly

Lycorma delicatula (WHITE)
(Hemiptera: Fulgoridae)

The spotted lanternfly, *Lycorma delicatula* (White), an invasive planthopper, was first discovered on September 22, 2014 in eastern Berks County, Pennsylvania. It is native to China, India, Vietnam, and was unintentionally introduced to Korea where it has become a major pest. This insect prefers to attack tree of heaven, but it will feed on many other host plants including grapes, apples, stone fruits, and has the potential to greatly impact the grape, fruit tree, and forest products industries. Early detection is vital for the protection of Pennsylvania businesses and agriculture.



(A) Spotted lanternfly adult showing the forewings and hind wings (B) Adults at rest on bark (C) Lateral view of an adult (D) 1st instar nymph (E) 4th instar nymph (F) Adult feeding on wild grape, *Vitis* sp. (G) Weeping sap trail on bark (H) Egg mass (oothecum) covered in coating (I) Old hatched egg mass on tree trunk.

Identification:

The spotted lanternfly adult is approximately 1" long and 1/2" wide at rest. The forewing is gray with black spots and the wing tips are reticulated black blocks outlined in gray (A, B, C). The hind wings have contrasting patches of red and black with a white band (A). The legs and head are black; the abdomen is yellow with broad black bands. Young nymphs are black with white spots, and in the last (4th) instar develop red patches (D, E).

Hosts:

In the fall, adults congregate on tree of heaven (*Ailanthus altissima*), willows (*Salix* spp.), and other trees in groups of up to 20. Egg masses are laid on the trunk and branches of medium to large trees. After hatching in the spring, nymphs will move off the tree and search out new hosts, including several kinds of agricultural crops. In Korea, it has been reported to attack 65 different tree species, 25+ of which are known to grow in Pennsylvania.

Symptoms and Signs:

Trees, such as tree of heaven and willow, will develop weeping wounds. These wounds will leave a grayish or black trail along the trunk (G). This sap will attract other insects to feed, notably wasps and ants. In late fall, adults will lay egg masses on host trees and nearby smooth surfaces like stone, outdoor furniture, vehicles, and other structures. Newly laid egg masses have a gray mud-like covering that can take on a dry cracked appearance over time (H). Old egg masses appear as rows of 30-50 brownish seed-like deposits in 4-7 columns on the trunk, roughly an inch long (I).

What to do:

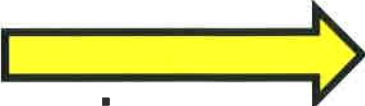
If you see egg masses, scrape them off, double bag them and throw them away. You can also place the eggs into alcohol or hand sanitizer to kill them. Please report all destroyed egg masses on our website listed below.

Collect a specimen: Specimens of any life stage may be submitted to the Pennsylvania Department of Agriculture's Entomology Lab for verification. Directions for submission are on the reverse side of this alert.

Take a picture: A photograph of any life stage (including egg masses) can be submitted to Badbug@pa.gov.

Report a site: If you can't take a specimen or photograph, call the Automated Invasive Species Report Line 1-866-253-7189 and leave a message detailing your sighting and contact information.

Virginia Cooperative Extension



TERRY~717-480-3339
BETSY~717-303-6987

HOW TO Check your property for
Ailanthus trees

PUBLICATION 420-322

Invasive Exotic Plant Species:

Ailanthus (*Ailanthus altissima*)

Matthew Yancey, Extension Agent, Natural Resources, Northwest District



Background

Ailanthus, also known as tree-of-heaven and paradise-tree, is a major nuisance to foresters, farmers, and homeowners alike. Its prolific seeding and ability to sprout from roots and stumps and grow quite rapidly just about anywhere make it a serious competitor and threat to native species and cultivated crops. On top of that, ailanthus is allelopathic, producing substances that are toxic to and inhibit the growth of neighboring plants.

Identification

Leaves – When present, the leaves are compound and typically measure 1 to 3 feet in total length with 11 to 25 individual leaflets.

Twig – Twig is smooth to fuzzy with large shield-shaped leaf scars after the leaves drop. Ailanthus's most convincing identification feature is the inside of a broken twig, which smells like rancid or burnt peanut butter and even resembles it in appearance.

Flower – Clusters of yellow-green flowers bloom in late spring to early summer. Male flowers have a disagreeable scent, similar to that of the broken twig.

Fruit – Fruit is a samara, similar to the fruit found on maple trees.

Bark – Bark is smooth and green when young, eventually turning gray and resembling a cantaloupe.

Form – Ailanthus first grows as a single, unbranched stem or multiple stems from the ground, particularly when cut back. An ailanthus mono-cultural thicket will eventually result. Individual stems can grow eight feet in one year and ultimately up to 100 feet in high.



Leaf



Pith



Bark



Leaf scar

www.ext.vt.edu



Produced by Communications and Marketing, College of Agriculture and Life Sciences,
Virginia Polytechnic Institute and State University, 2009

Virginia Cooperative Extension programs and employment are open to all, regardless of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Mark A. McCann, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Alma C. Hobbs, Administrator, 1890 Extension Program, Virginia State, Petersburg



VIRGINIA STATE UNIVERSITY

Penn State Recommendations for Treating Spotted Lanternflies

On Grape Vines/Grapes

The Pennsylvania Department of Agriculture (PDA) regulates a range of agricultural practices, and is therefore, prohibited by law from recommending or promoting any particular product, any particular brand-name, or any particular formulation of any commercially available product. The PDA can, however, provide links and access to research and recommendations from scientific and academic sources unrelated to the PDA's mission of regulatory oversight and agricultural protection.

Below find some recent recommendations from Penn State regarding the treatment of SLF nymphs on grapes and grapevines. These recommendations include insecticides, insecticidal soaps, and mechanical treatments. These formulations/methods have been found effective according to research at Penn State. In addition, each of the following listed formulations is properly labeled for use on grapes and grapevines.

Note that some of the listed products are properly and legally labeled for use on a wide range of fruit-bearing and ornamental trees and plants. The research informing these recommendations does not reference any of these trees and plants. Property owners, producers, woodlot managers, agriculturalists, and citizens, are to use commercially available products, according to labeled instructions, and (at) legally appropriate rates, on those species for which each formulation or product is clearly labeled.

This list of products is followed by some alternative remedies which avoid the use of formally labeled chemical insecticides.

Trade Name
Voliam Flexi
Sevin
Imidan
Baythroid
Brigade/Sniper
Danitol
Mustang Max
Actara
Admire Pro

Google
1) Home Depot
2) Home Depot
3) Ace
4) Amazon
Sinotefran