



PRINCETON
DEPARTMENT OF INFRASTRUCTURE
AND OPERATIONS
1 Monument Drive
Princeton, New Jersey 08540
609-497-7639
Fax (609) 279-9327
www.princetonnj.gov
Taylor Sapudar LTE #621

Spotted Lantern Fly

As many residents are aware, the Spotted Lantern Fly, *Lycorma deliculata*, has been spotted in Princeton. The volume of insect populations that I have personally seen in Princeton have been located on properties that have the Tree of Heaven; *Ailanthus altissima*, however the lanternfly is capable of feeding on other trees. Please see below for information pertaining to the insect.

- Native to China, the Spotted Lantern Fly (SLF) was accidentally introduced into Pennsylvania in September of 2014, and was first detected in New Jersey in 2018. It is now also in parts of Maryland, Delaware, Virginia, and New York.
- At this time, the SLF is NOT an insect that will cause death to healthy hardwood trees; however, they do reduce plant vigor and can become a nuisance.
- The Lantern Fly is NOT dangerous to humans or animals; however, they do pose a threat to agriculture (specifically the grape vine) and outdoor recreation.
- The spotted Lanternfly is a plant hopper belonging to the family Fulgoridae in the order Hemiptera.
- Like most hemipterans, SLF feeds on plants using their sucking and piercing mouthparts to extract plant sap.
- Adults and nymphs feed on phloem tissues of bark and young stems with their piercing and sucking mouthparts and excrete large quantities of liquid (honeydew).
- Honeydew facilitates the growth of sooty mold and can make decks, cars, patios, and walkways a sticky mess if they are located beneath a tree with a high population of lanternflies. The sap also attracts activity from wasps, hornets, ants, and bees.
- The preferred host is the Tree of Heaven, *Ailanthus altissima*. Some studies indicate that the SLF needs the Ailanthus to complete its life cycle.
- Tree of Heaven is an invasive tree native to China that is often found on the edge of woods, rear of parking lots, edges of roads, and other areas that are not mowed regularly.
- When crushed, the leaves of the Tree of Heaven smell like rotten peanut butter.
- The lanternfly life cycle is 1 year. Egg masses are laid in the fall and hatch in the spring of the following year. Eggs can be laid on nearly any flat surface such as tree trunks, cars, picnic tables and houses. If the egg masses are seen, it is recommended to scrape and remove. A single egg mass can contain up to 50 eggs.
- Removal of host trees and their root systems is recommended by NJ and PA Departments of Environmental Protection (DEP).
- If a property is inundated with ailanthus, DEP recommends removing all female trees, and leaving about 10% male trees to use as a host trap.
- Tree trapping as well as organic and synthetic insecticides are available for treatment. Call your local tree care professional to develop a management plan tailored to your needs. If applying insecticides, always read the label. Only use insecticides that are registered by the EPA. Please refer to the ***Penn State Extension Management for Residents*** website on the second page.

Additional Useful Information

<https://www.nj.gov/agriculture/divisions/pi/prog/spottedlanternfly.html>

<https://njaes.rutgers.edu/spotted-lanternfly/>

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

https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/Entomology/spotted_lanternfly/Pages/default.aspx

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

https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/Entomology/spotted_lanternfly/Documents/Time%20of%20year%20management%20chart.pdf

<https://extension.psu.edu/tree-of-heaven>