

## PEST ALERT: Spotted Lanternfly



The spotted lanternfly (SLF) (*Lycorma delicatula*) has recently been detected in Pennsylvania, New York, Virginia, New Jersey, Delaware, and Maryland. Native to East Asia and India, SLF is considered highly invasive due to its wide host range of more than 70 plant species and lack of natural enemies. The insect arrived in North America in egg cases laid on a shipment of decorative stone in 2014 in Pennsylvania. SLF **has not yet been detected in Illinois**, but the insect can spread very easily, and everyone should be on the lookout!

### Damage and Hosts

Adults are found on tree trunks, stems, and near leaf litter at the base of the tree. Adults favor (*Ailanthus altissima*) and grapevine (*Vitis vinifera*) as host plants and tree-of-heaven seems to be a preferred host for insect development. Adults and nymphs pierce the bark with their syringe-like mouthparts and feed on the sap of the tree. Like all sap feeding insects, they excrete the large quantities of sap they consume as “honeydew”, a sweet sticky liquid. Heavy feeding may lead to plant stress and/or plant death. Sooty mold typically develops in association with the honeydew and diminishes the plant’s ability to produce food (photosynthates). SLF has the potential to greatly impact the grape, orchard, logging, tree and wood-products, and green industries. It can also make forests nearly impossible for recreation due to mold and the associated odor and the “rain” of sticky honeydew from the trees (Figure 1).



Figure 1. A backyard tree infested with SLF adults. Photo by Lawrence Barringer, PA Dept. of Ag.

### Identification and Life Cycle

Upon egg hatch, the young nymphs disperse and begin feeding on a wide range of hosts and producing large amounts of honeydew. The young nymphs are tiny and wingless, black initially, but developing red patches as the nymphs mature, and have white spots on their body and legs (Figure 2). Adults are large (1-inch-long and ½ inch wide) with black legs and head, yellow abdomen, and light brown to gray forewings. The hind wings are scarlet red with black spots (Figure 3). SLF females lay egg masses containing 30-50 eggs that are gray-brown and covered with a shiny grey waxy covering. Adult females will tend to lay eggs on smooth-trunked trees or any vertical smooth natural and/or man-made surface. **They are able to lay egg masses on trucks, train cars, RV’s, etc., so the insect can easily travel to new locations.** The SLF has one generation per year (univoltine) with eggs hatching in the spring and early summer and adults appearing in July through August. Egg-laying begins in September and continues through November (Figure 4).



Figures 2 and 3: Spotted lanternfly nymph (Left) and Adult spotted lanternfly (Right)

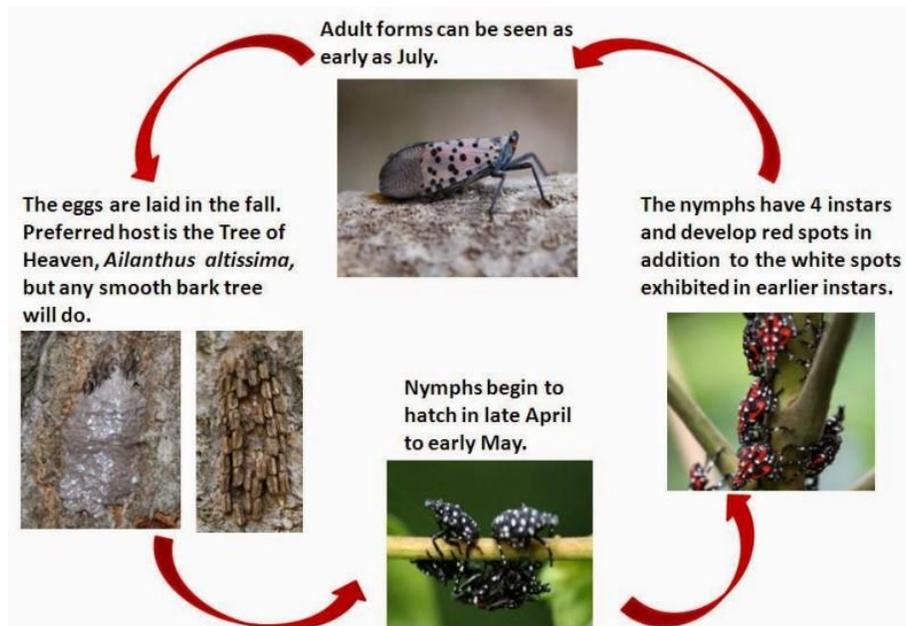


Figure 4: Life cycle of the spotted lanternfly. Image credit: Herbein's Garden Center

## Management and Monitoring

If you find insects resembling SLF or gray egg masses like those depicted above, please contact Scott Schirmer at IDOA ([scott.schirmer@illinois.gov](mailto:scott.schirmer@illinois.gov)), Greg Rentschler at USDA APHIS PPQ ([Greg.J.Rentschler@usda.gov](mailto:Greg.J.Rentschler@usda.gov)) or [lanterfly@illinois.edu](mailto:lanterfly@illinois.edu). Collect a sample or take a photo, if possible, for confirmation. Management options are being researched in areas where there is an active infestation. At this time, in Illinois, monitoring for the insect is key!

Sources:

1. Penn State Extension. Spotted Lanternfly. <https://extension.psu.edu/spotted-lanternfly>
2. USDA APHIS. 2019. Pest Alert: Spotted Lanternfly. APHIS 81-35-024.
3. Dara, Surendra K. An update on the invasive spotted lanternfly, *Lycorma delicatula*: current distribution, pest detection efforts, and management strategies. Pest News: eJournal about endemic and invasive pests in California. UC ANR. 2018.