

Homeowner Suggestions for Managing Spotted Lanternfly

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Introduction

Spotted lanternfly (SLF) arrived in Virginia in 2018 and is spreading across the state. This invasive pest strongly prefers feeding on tree of heaven, *Ailanthus altissima*, but it also feeds on many other plants. SLF is a pest of grapes and can be a nuisance around residences.

Identification

Adult SLF measure about 2.54 cm (1") long and 1.3 cm (0.5") wide. The forewings are light colored with black spots and rectangles (Fig. 1). The hindwings are red, black, and white (Fig. 2). At rest, the forewings covering the colorful hindwings (Fig. 1).



Figure 1. Adult spotted lanternfly (E. Day, Virginia Tech).

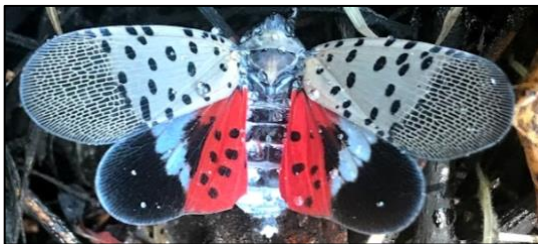


Figure 2. Adult spotted lanternfly with wings spread (E. Day, Virginia Tech).

Young SLF nymphs (up to 10 mm or 0.4") are wingless, black, and have white spots on the body

and legs (Fig. 3). Mature nymphs (up to 16 mm or 0.6") are red and black with white spots (Fig. 4). Nymphs are wingless and can jump but not fly.



Figure 3. Young spotted lanternfly nymph (E. Day, Virginia Tech).



Figure 4. Mature spotted lanternfly nymph (Lawrence Barringer, PA Dept Ag, Bugwood.org).

SLF egg masses are approximately 25-38 mm (1-1.5") long and 13-19 mm (0.5-0.75") wide. They are usually covered with a shiny grey, waxy protective covering when fresh. In time the covering turns a dull grayish-brown and may crack and fall off, exposing the eggs underneath (Fig. 5).

SLF lays egg masses on tree trunks and branches, as well as on many inanimate objects. Egg masses can

be found on vehicles, mobile homes, lawn furniture, grills, dog houses, and decorative yard items. They can also be found on fencing, tarps, decking, construction materials, and firewood. Do not move any items that may have egg masses on them as the eggs can hatch in the new location.



Figure 5. Spotted lanternfly egg mass (Richard Gardner, Bugwood.org).

Life Cycle

Know what stage of SLF can be found during the year (Fig. 6). SLF overwinters as eggs laid in egg masses. Eggs hatch in the spring and nymphs are present into August, but adults can appear by late July. Adults begin laying eggs in September and continue until they are killed by cold weather (Fig. 6). The life stages can overlap and, depending on the time of year, multiple stages can be found at the same time.

Management

- Destroy egg masses during winter to reduce the number of nymphs in spring.
- Contact and systemic insecticides are not effective against egg masses. Use dormant oil as

a spot spray on egg masses in late winter and before bud break in the spring. Dormant oil will not prevent egg laying by SLF.

- Use contact insecticides such as bifenthrin, zeta-cypermethrin, carbaryl, and malathion as spot sprays on nymphs and adults seen on the trunk, branches, and foliage of plants. Repeat spot sprays as needed.
- Use neem oil, insecticidal soap, or pyrethrin sprays for organic control against nymphs and adults, but these will likely need to be repeated throughout the season.
- The systemic insecticides dinotefuran and imidacloprid can be used as trunk sprays, trunk injections, or soil drenches, depending on the label.
- Protect pollinators. Do not use oil drenches if trees and shrubs are in flower or if flowering plants are planted at the base of the tree or shrub.
- Some horticultural and paraffinic oils can be used on egg masses during the growing season. Test on a few branches first to make sure they do not harm the tree. Treat the entire tree if no damage is observed after two weeks.
- If you find SLF [in an area not known to have it](#), take a photo or collect it before contacting your [local Cooperative Extension office](#). There is no need to report SLF from areas known to be infested.

Additional Resources

For more information on SLF, visit Virginia Cooperative Extension's [Spotted Lanternfly In Virginia](#) website. See the current [Pest Management Guide for Home Grounds and Animals](#) (VCE 456-018) for chemical recommendations for SLF.

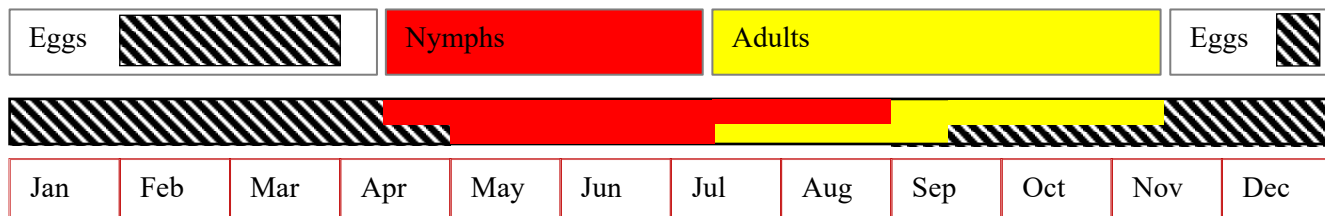


Figure 6. Spotted lanternfly life stages and the time of the year that they are found.

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