



Spotted Lanternfly (*Lycorma delicatula*): A new invasive pest in Pennsylvania

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Late September (2014) the Pennsylvania Department of Agriculture received a report of a new pest on trees in Berks County (east of Reading), identified quickly as spotted lanternfly (SLF). Native to southeast Asia, it has been introduced to South Korea where it is reported a serious pest of grapes and damaging to ornamental trees.

Description & Life Cycle

The adults are large (1" long) moth-like planthoppers with one generation/year. Wings are a lavender-gray color with distinctive spots; hind wings have a bright red band. SLF is not easily mistaken for any other insect. Egg masses are laid on bark and other surfaces, then covered with a material resembling a gray 'blob of mud' leaving them well-camouflaged. Nymphs hatch in spring and resemble immature stink bugs, black with white spots. Later stages develop red spots. Adults are present in late summer. They lay eggs in mid-fall, then die by early winter.



SLF adult with wings spread showing colorful hind wing © Holly Raguza, Bugwood.org



Spotted lanternfly adults on tree-of-heaven © Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org



The egg masses resemble a gray "blob of mud" © Holly Raguza, Bugwood.org



Feeding leaves sap streaks flowing on bark © Holly Raguza, Bugwood.org



Lateral view of adult spotted lanternfly © Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

Hosts

Spotted lanternfly will attack at least 56 trees including orchard trees, ornamentals, and hardwoods. In Pennsylvania heavy feeding has been noted on *Ailanthus* and *Salix* and adults have been observed on *Acer*, *Vitis*, *Populus*, *Prunus*, *Liriodendron*, *Phellodendron*. So far the insect has not been associated with disease transmission.

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Distribution

Although the potential for damage isn't known, five towns and two boroughs are now under quarantine and the Pennsylvania Department of Agriculture is pursuing eradication. The infestation appears to be fairly concentrated geographically but insects have been found in a couple of sites a mile or two outside the central area. SLF has been present at least two years or so and from evidence it is clear the insect survived 2013–2014 winter conditions in Pennsylvania.

Its natural rate of spread appears to be slow, but the insect moves long distances by indiscriminate egg laying on bark (including firewood), lumber, masonry, wheels, lawn furniture, crates, tiles under rocks, high in tree canopies—almost any smooth surface. Adults tend to congregate on bark where they may be noticed. Feeding leaves sap streaks flowing on bark, resulting in black sooty mold or mat of fungus building at the base of trees below where adults are found. Yellow jackets and bees attracted to the sap led to the initial detection.

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Detection & Surveys

In Pennsylvania, affected residents can participate in volunteer tree banding and detections reported to the PA invasive species hotline 1-866-253-7189, or [email badbug@pa.gov](mailto:badbug@pa.gov). Surveys there will begin in mid-May. In other states, contact local Extension offices or state department of agriculture to report suspect sightings (submit photos and/or specimens).

A USDA Pest Alert is available at:

www.aphis.usda.gov/publications/plant_health/2014/alert_spotted_lanternfly.pdf. The Pennsylvania Dept. of Agriculture has more information including a pest alert and photos at their website (www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/Entomology/spotted_lanternfly/Pages/default.aspx).

