

Invasives: Spotted Lanternfly

(*Lycorma delicatula*)

submitted by Lisa Marie Gee

The Spotted Lanternfly is an invasive plant hopper pest that has been identified in Berks County, Pennsylvania in September 2014. It is native to China, South Korea, Japan and Vietnam. It was a medicinal insect in China since the twelfth century used for the relief from swelling. It can walk, jump or fly short distances but for longer travel it is spread by moving infected material or items containing egg masses or the insect at any stage in its development.

The Spotted Lanternfly only has one generation per year and over winters as eggs. Egg masses of 30-50 eggs are laid on host plant surfaces and on non-host materials such as bricks, stones and dead plants in September and continues through late November to early December. The egg masses are yellowish-brown in color and covered in a waxy gray coating prior to hatching. The eggs remain viable from October to July. Eggs hatch in spring and early summer. Once the eggs have hatched

the nymphs go through four larval instars with the first three having wings that are black with white spots and the fourth has wings with red patches and white spots. The adults appear in late July and are approximately one inch long and one half inch wide. The forewings are light brown with black spots at the front and a speckled band at the rear. The hindwings are red with black spots at the front and white and black bars at the rear. The abdomen is yellow with black bars. Its coloring actually makes it rather pretty but its feeding activities do a lot of damage in both the nymph and adult form.

There are many plants that this pest likes. To start it has

been detected on the following trees: apple, plum, cherry, peach, nectarine, apricot, almond, oak, walnut, poplar and pine as well grapevines. It can feed on up to 70 different species. Its favorite plant is the tree of heaven, *Ailanthus altissima*. The Spotted Lanternfly is known to change its host plant as it goes through its developmental stages.

The nymphs and adults feed by sucking the sap from the stems and leaves of the plant. The nymphs are mostly found on the branches and rachises with the adult mostly observed on the tree trunks. Feeding can cause a withering of the foliage and attacked trees can develop weeping wounds on the trunks. As this pest feeds it also excretes a sticky sugar rich fluid, honeydew, which can cause sooty molds to form on the plant. Signs of an infestation are the presence

of ants, bees, hornets or wasps on or around the plant and/or the presence of the honeydew and black sooty mold. It is easiest to spot this pest at dusk or at night as they gather in large numbers and can be seen migrating up and down the trunk of the plants.

What to do? This pest is susceptible to broad spectrum pyrethroids, organophosphate and neonicotinoid insecticides. Sticky traps at the base of the plants can catch some of them. Nymphs and adults are highly attracted to spearmint oil. Birds have been observed eating them but then vomiting after the ingestion. They are researching the use of egg parasitoids. The best thing to do is scout out the egg masses and scrape them off, double bag them and place in the garbage or put the eggs into alcohol or hand sanitizer to kill them. Not transporting the insect in any stage is paramount.

The Spotted Lanternfly is a big concern as it could seriously harm this country's grape, orchard and logging industry. Currently this pest has been noted in many areas in Pennsylvania where there are quarantines in place. The regulated articles involved in the quarantine are: any living stages of the Spotted Lanternfly; brush, debris, bark or yard waste; landscaping, remodeling or construction waste; logs, stumps or any tree parts; firewood of any species; grapevines for decorative purposes or as nursery stock; nursery stock; crated materials and outdoor household articles. We thought not transporting firewood was difficult with the Emerald Ash Borer, but this pest could cause much more to be quarantined than just firewood and the potential destruction to our fruit crops could make it a worse pest.

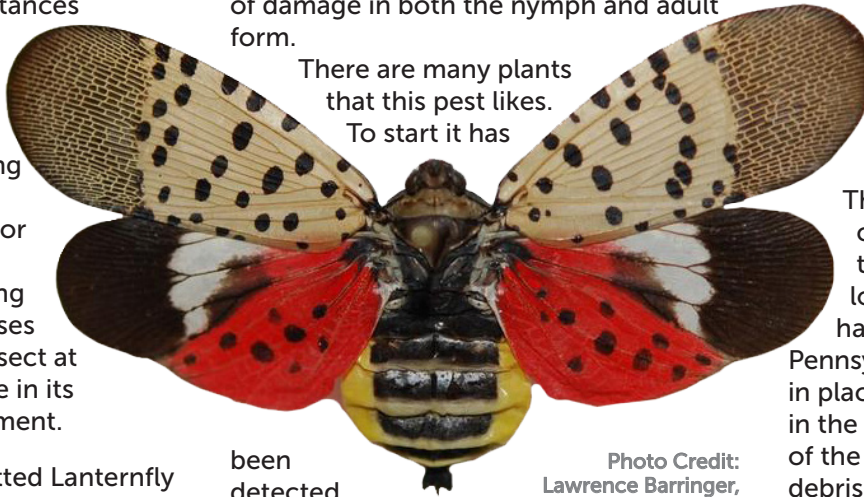


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