PEST ALERT
Spotted Lanternfly

Spotted lanternfly, Lycorma delicatula (Hemiptera: Fulgoridae) is a non-native invasive insect from Asia that has recently arrived in the Mid-Atlantic region of the United States. The insect was first discovered in a Berks County, Pennsylvania stone yard in 2014. However, based on pest numbers and egg masses, experts believe it had been established in the area one or two seasons prior. The pest has since spread, resulting in a quarantine imposed on multiple counties in Pennsylvania. Spotted lanternfly (SLF) has now been found in several other states throughout the region, including Delaware, New Jersey and Virginia. As this insect has limited mobility, its spread is occurring primarily by human assisted travel. The arrival of this new pest could have a significant impact on Maryland and U.S. agriculture.

Lifecycle  Adult SLF are large (approx. one inch long), strikingly colored insects, with grayish spotted front wings and red, white, and black patterned hind wings. The body is yellow and black banded (Fig. 1 – Adult SLF). However, the insect dramatically changes appearance throughout its life cycle. The tan eggs, 30-50 per egg mass, covered with a grey waxy coating, are laid on any vertical surface from late September until frost (Fig. 2 – Eggs; Fig. 3 –Eggs on barrel; Fig 3a - Older egg masses). Eggs hatch from late April to early May, into tiny white-spotted angular black nymphs (Fig. 4 – Young nymphs) and begin feeding by sucking the juice from host plants. As they grow older, nymphs molt and become bright red and black with white spots (Fig. 5 – Full-grown nymphs). Adults first appear around mid-July to feed, mate, and lay eggs (Fig. 6 – Cluster of adults).
Feeding Behavior  Nymphs have been found feeding on an ever-expanding list of plants, including apples, apricots, blueberries, cherries, grapes, hops, nectarines, peaches, oak, pine and poplar, among many others. Adults prefer—and may need—to feed on tree-of-heaven (Ailanthus altissima), another non-native invasive species.

Potential Damage  Damage from SLF feeding with its piercing-sucking mouth parts can cause stunted growth, reduced yields, and death of the host plant. As the insects feed, they excrete a sugary honeydew that collects and can attract other insects, as well as supporting growth of black sooty mold fungus that blocks sunlight from the leaves.

Monitoring for Spotted Lanternfly in Maryland

Although SLF has not been detected in Maryland, early detection will aid in quarantine and management efforts. Be diligent in scouting for this pest, especially along tree lines. Eggs have been found on vehicles and other objects, so it is very easy for this pest to be moved to another area (a “hitchhiker”).

If you believe you have identified a SLF in Maryland:

1. Contact your local University of Maryland Extension Office or the Maryland Department of Agriculture with the location and host ASAP. (MDA (410) 841-5920; Don'tBug.MD@maryland.gov)
2. For confirmation, carefully collect a specimen of all life stages found in a clear rigid container. Freeze to kill or place in an alcohol or vinegar solution (hand sanitizer or white vinegar works well) and submit specimens to your local extension office or MDA.
3. If you cannot collect a specimen, submit a high-quality photograph to your local extension office.

How to Help  You can help prevent the spread of SLF in several ways. Learn the insect’s unique appearance and inspect plants in your area for adults, nymphs or eggs. You can place ‘sticky-bands’ around tree-of-heaven trunks to trap nymphs during their daily up and down migration.

If you see a suspect insect, trap or photograph it and contact Maryland Department of Agriculture at 410-841-5920, or Don'tBug.MD@maryland.gov. Collected dead specimens of any stage can be mailed or delivered to: Maryland Department of Agriculture Plant Protection & Weed Management 50 Harry S. Truman Parkway Annapolis, MD 21401

Sources  https://mda.maryland.gov/plants-pests/Pages/spotted-lantern-fly.aspx
https://extension.umd.edu/learn/spotted-lanternfly-slf-i%E2%80%94background

Helpful Links  Maryland Department of Agriculture * University of Maryland Extension
Pennsylvania Department of Agriculture * USDA-APHIS Pest Alert

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