

# MESSENGER-INQUIRER

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## Watch out for Unwanted Insect Hitch Hikers

As we travel to visit family and for vacations, be aware of unwanted insect hitchhikers. One of the invasive insect pests that has moved from state to state by hitchhiking is the spotted lanternfly. This pest damages plants and leaves a sticky mess.

The spotted lanternfly entered the United States in 2014 in Pennsylvania from Asia. At the time of writing this article, it has not been detected in Kentucky. However, it has been found emerging from eggs in Cincinnati this May. University of Kentucky Entomologists are on high alert for its appearance in Kentucky and are involving 4-Hers and Extension Master Gardeners in watching for this pest.

Why the concern? The spotted lanternfly feeds on over 70 different plant hosts. The hosts include willow, maple, apple, walnut, pine, poplar, stone fruit trees, hops, and grape vines. The insect feeding in the vineyard destroys the flavor of the wine made from those grapes. It can also quickly kill a vineyard if the insect is not managed. Plants are damaged and the health of plants is reduced to the point of causing the plant to die.

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Another undesirable result of spotted lanternflies feeding on plants is their production of large amounts of honeydew, which is a sticky, sugary fecal material. This attracts black sooty mold and stinging insects which feed on the honeydew. With the high numbers that attack a tree, it is unpleasant to be outside near the feeding area.

The tree of heaven (*Ailanthus altissima*) is the preferred host. The plant is invasive and crowds out native species in woodland settings and in forests when trees were harvested. It can be found in unmanaged disturbed urban areas, along the roadside and railroad tracks according to Dr. Ellen Crocker, Extension forestry specialist. This plant has 1 to 4 feet long compound leaves with 10-24 leaflets. The leaflets are spear shaped and smooth along the edges. At the base of each leaflet there is a small lobe with a glandular bump on the underside. When the branches and stems are cut, it begins to smell similar to rancid peanut butter. The bark of the tree is green when young but turns gray as it ages. Tree of heaven is often found in a dense group of smaller trees clonally connected through roots. It can be confused with black walnut, but the leaflets of black walnut have more than 10 veins. Another lookalike is sumac. However, the leaflets of sumac have a saw tooth like edge.

Where the spotted lanternfly is found, there is a regulatory response which includes the restriction of moving goods such as lumber, results in quarantines, and may require permits to travel or move materials from the infested area. These financial impacts and the decrease in the quality of life are certainly reasons to keep this insect out.

The spotted lanternfly has piercing-sucking mouth parts for sucking sap from plants. Signs of infestation on a plant are wilted foliage, branch dieback, large amounts of sticky, sugary

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fecal material, black sooty mold growing on the fecal material, and an increase of flies, bees, and wasps feeding on the honeydew around the affected plant. In some cases, sap may ooze from an infested tree.

The life cycle of the insect goes through the egg stage to nymphs to adults. The individual eggs are laid in masses of 30 to 40 and up to 75-78. The masses are covered with a putty-like substance produced by the mother which starts out white but turns to a tan or khaki coloration. It has been described as smeared mud. The eggs are found from September of one year into June of the next year. The female lays the eggs on many objects from natural to man-made such as lawn furniture, mailboxes, and automobiles. It is considered a “hitchhiking” pest. The eggs are unintentionally moved when they are laid on firewood or cars, thus moving the insect pest to new areas. When the nymphs emerge from the eggs, the mass looks like open coin purses.

There are four nymphal stages for the spotted lanternfly before it reaches adulthood. The first three instars are black with white dots as they increase in size. The last nymphal instar is described as black with red patches and white dots. The last stage is about half an inch long. During the nymphal stage, the insect jumps when approached. The nymphal stages can be seen from April through October.

The adult is usually seen from July through November. They are over an inch long. The wings fold over the abdomen like a tent. The color of the wings of the adult are referred to as khaki pink. The pattern on the first pair of wings is half black spots and half broken black lines

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to the tip of the wings. Underneath the front wings, are a smaller pair of wings. This pair of wings are partially red with black spots and other black and white markings.

For more information about the spotted lantern fly, contact the Daviess County Cooperative Extension Service at 270-929-3108 or [annette.heisdorffer@uky.edu](mailto:annette.heisdorffer@uky.edu). Photographs and more information as provided by Drs. Jonathan Larson, Ric Bessin, and Ellen Crocker, University of Kentucky Cooperative Extension specialists, that were used in this article, can be found at <https://entomology.ca.uky.edu/files/ef465.pdf>.

## **Annette's tip:**

If you see any stage of the spotted lanternfly, take a photo, or capture it, and bring it to the Daviess County Cooperative Extension Service Office or office in your county for positive identification. Photos of lookalikes are found in the publication above.

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