

MESSENGER-INQUIRER



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Keeping an Eye on the Pest, Spotted Lantern Fly
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The best methods of managing an insect pest are to keep it out of the area and watch for the pest to prevent a buildup if it does show up here. The spotted lantern fly is a pest that damages plants and leaves a sticky mess making it undesirable to go outside. This pest hitchhikes on vehicles so it is easy to move it from state to state

The spotted lanternfly entered the United States in 2014 in Pennsylvania from Asia. It was found in Gallatin County, Kentucky in 2023. University of Kentucky Entomologists are on high alert for its appearance in other parts of Kentucky and are involving citizen scientists such as 4-Hers, Extension Master Gardeners, and the general public in watching for this pest.

The spotted lanternfly is concerning because it feeds on over 70 different plant hosts. The hosts include willow, maple, apple, walnut, pine, poplar, stone fruit trees, hops, and grape vines. Plants are damaged and the health of plants is reduced to the point of causing the plant to die. In addition, the insects feeding on grape vines in the vineyard destroy the flavor of the wine. It can also quickly kill a vineyard if the insect is not managed.

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Another undesirable result of the spotted lanternflies feeding on plants is their production of a large amount of honeydew, a sticky, sugary fecal material. This attracts black sooty mold and stinging insects that 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. This plant is invasive, crowding out native species in woodland settings and forests when trees are harvested. According to Dr. Ellen Crocker, Extension Forestry Specialist, it can be found in urban areas, along the roadside and railroad tracks. This plant has 1 to 4 feet long compound leaves with 10-24 leaflets. The leaflets are spear-shaped and smooth along the edges. The base of each leaflet has a small lobe with a glandular bump on the underside. When the branches and stems are cut, they begin to smell like 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.

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 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.

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The life cycle of the insect goes from the egg stage through 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 puttylike 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 is referred to as khaki pink. The pattern on the first pair of wings is half black spots and half broken black lines to the tip of the wings. Underneath the front wings, are a smaller pair of wings. This pair of wings are part red with black spots and other black and white markings.

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For more information about the spotted lantern fly, contact the Daviess County Cooperative Extension Service at 270-929-3108 or 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 tips:

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.

The brown flagged tips of trees, especially oaks, are caused by the periodical cicada laying eggs in the small branches. The eggs hatch and the nymphs fall to the ground to feed until it emerges again.

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