

Spotted Lanternfly *Lycorma delicatula*

About

Spotted lanternfly (*Lycorma delicatula*) is a large, colourful insect native to China, Japan, India, and Vietnam. Nymphs and adults damage a wide variety of host plants — including grapes, stone fruits, and hardwood trees — by feeding on their sap using a series of long, straw-like mouthparts. Adults prefer to lay eggs on Tree of heaven (*Ailanthus altissima*), and it appears this plant is important in populations becoming established in North America. It recently arrived in the eastern United States, where it has caused widespread damage and is considered an extremely harmful pest. Although Tree of heaven is a known preferred host, Spotted lanternfly may still be able to establish populations using other host plants. Therefore, a lack of Tree of heaven does not necessarily negate a given area's susceptibility to Spotted lanternfly presence. Listed below are some of the other plant species that attract and harbour Spotted lanternfly.

Legal Status

Spotted lanternfly does not currently occur within Canada but is listed as a regulated pest by the Canadian Food Inspection Agency (CFIA) due to its potential to damage Canadian crops and other plant-based industries.

Distribution

Spotted lanternfly is not yet present in BC or Canada. It is currently established in the eastern United States (Pennsylvania, New York, New Jersey, Delaware, Maryland, and Virginia).

Identification

Appearance: Adults grow up to 2.5 cm in length and 1.2 cm in width and are most recognizable by their colourfully patterned wings, and the yellow stripes on the sides of their abdomen. The adult insect is visually distinct from any native Canadian species. When at rest, the spotted, translucent grey forewings are held at an angle against the body and cover the red hindwings, which makes the wings appear pinkish.

Egg: Egg masses are approximately 2.5 cm long and contain 4-7 vertical rows of eggs that are generally laid on the



Eggs - E. Swackhamer

trunks of host trees. When freshly laid, they are covered in a waxy substance that disappears over time.

Nymphs: Upon emergence from an egg, the nymphs or immature stages of Spotted lanternflies look like miniature adults without wings. They range from black with white spots to red with white spots.



Nymph - L. Barringer; Bugwood.org

Ecological Characteristics

Habitat: These insects spend most of their lives on or travelling between host plants. Their preferred hosts include Tree of heaven, grape (*Vitis* spp.), apples (*Malus* spp.), plums (*Prunus* spp.), cherries (*P. avium*), peaches and nectarines (*P. persica*), apricots (*P. armeniaca*), maple (*Acer* spp.), pine (*Pinus* spp.), oak (*Quercus* spp.), walnut (*Juglans* spp.), and poplar (*Populus* spp.). They have been known to feed on many other hardwood tree species as well.

Reproduction: Adults start to appear in July and lay eggs on host plants throughout the fall. The eggs overwinter, hatch in spring, and adults begin to appear in early summer.

Dispersal: Adults fly between host plants and may land on vehicles or other conveyances that carry them to new areas. In their invasive range in Pennsylvania, large numbers of adults have been known to hitch rides on freight trains and vehicles.

Impacts

Economic: If Spotted lanternfly arrives in BC, it will likely become a serious pest of vineyards and fruit orchards, damaging BC's agricultural, viticultural, and tourism industries.

Ecological: Spotted lanternfly can feed on more than 100 species of trees and plants and has a serious potential to damage BC's sensitive Garry oak habitats.

Best Management Practices

Prevention: If you are travelling with a land vehicle from an area in the United States where these insects have established (PA, NY, NJ, DE, MD, and VA), check the exterior of your vehicle carefully to ensure you don't have any hitchhiking lanternfly. Ensure that all camping gear is clean before movement from an area with known Spotted lanternfly. Regularly clean patio and outdoor furniture. Adhere to invasive species best practices such as Buy Local Burn Local when purchasing and using firewood to prevent any spread of invasive insects. Tree of heaven is considered an invasive species in BC — you can reduce the risk of Spotted lanternfly establishing by removing these preferred host plants from your property. Keeping an eye out for signs of their presence is also a good practice. Adult feeding creates weeping wounds on trees and the honey dew that they excrete results in sooty mold growth at the base of trees.

Reporting: If you believe you have found a Spotted lanternfly, contact the Canadian Food Inspection Agency using their online reporting tool: <https://www.inspection.gc.ca/about-cfia/contact-us/contact-cfia-online/eng/1299860523723/1299860643049>.



Sooty mold - L. Barringer; Bugwood.org



Honey dew excreting from wound
L. Barringer; Bugwood.org

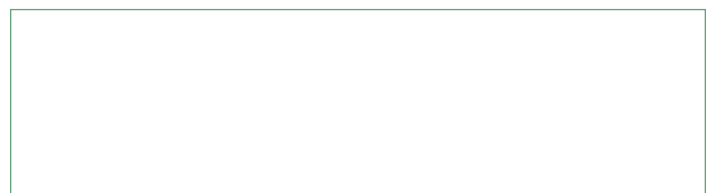
References/Links

<https://www.inspection.gc.ca/plant-health/plant-pests-invasive-species/insects/spotted-lanternfly/eng/1433365581428/1433365581959>

<https://www.invasivespeciesinfo.gov/terrestrial/invertebrates/spotted-lanternfly>

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<https://www.aphis.usda.gov/aphis/resources/pests-diseases/hungry-pests/the-threat/spotted-lanternfly/spotted-lanternfly>



ADDITIONAL
CONTACT INFO