



NCDA&CS

Plant Industry Division Plant Protection Section

PEST WATCH

Spotted Lanternfly

Lycorma delicatula (White)
(Hemiptera: Fulgoridae)



Spotted lanternfly, *Lycorma delicatula* (White), is an invasive planthopper that was first detected in the United States in Berks County, Pennsylvania, in 2014. The pest is native to northern China and was introduced to Korea in 2004 where it has become a major pest. This pest is not known to occur in North Carolina but early detection is critical for protecting North Carolina businesses and agriculture.



a) Spotted lanternfly adult (photo by Lawrence Barringer, Pennsylvania Dept. of Agriculture); b) Spotted lanternfly egg mass (photo by Pennsylvania Dept. of Agriculture); c) Spotted lanternfly eggs after hatching (photo by Kenneth R. Law, USDA-APHIS-PPQ); d) Late stage spotted lanternfly nymph with early stage nymph in inset (photos by Lawrence Barringer, Pennsylvania Dept. of Agriculture); e) Spotted lanternfly adults on *Ailanthus* with damage to tree evident in weeping wounds (photo by Emelie Swackhamer, PennState Extension)

HOSTS:

This insect is a known pest of grapes, stone fruits, apples, maples, oaks, willows (*Salix* sp.), and tree of heaven (TOH; *Ailanthus altissima*). The known host list contains over 70 species of plant. TOH appears to be the preferred host for late stage nymphs and adults.

IDENTIFICATION:

Adults of spotted lanternfly are approximately 1" long and 0.5" wide at rest. Their forewings are light gray with black spots with wing tips patterned with lines of small black blocks. The hindwings are red and black with a white band. Their bodies are yellow with black bands down the middle. The immature stages are black with white spots which develop into red and black with white spots in the later stages.

SIGNS AND SYMPTOMS:

This pest damages trees causing them to develop weeping wounds that leave a gray or black trail of sap down the trunk. This sap attracts other insects, such as wasps and ants, and can lead to the formation of fungal mats at the base of trees. In late fall, adults will lay egg masses on host trees and other smooth surfaces like outdoor furniture and equipment. These egg masses have a gray, mud-like appearance.

WHAT TO DO:

Collect a specimen. If you suspect you have found spotted lanternfly please collect a specimen and report it to badbug@ncagr.gov. We will assist you with specimen submission.

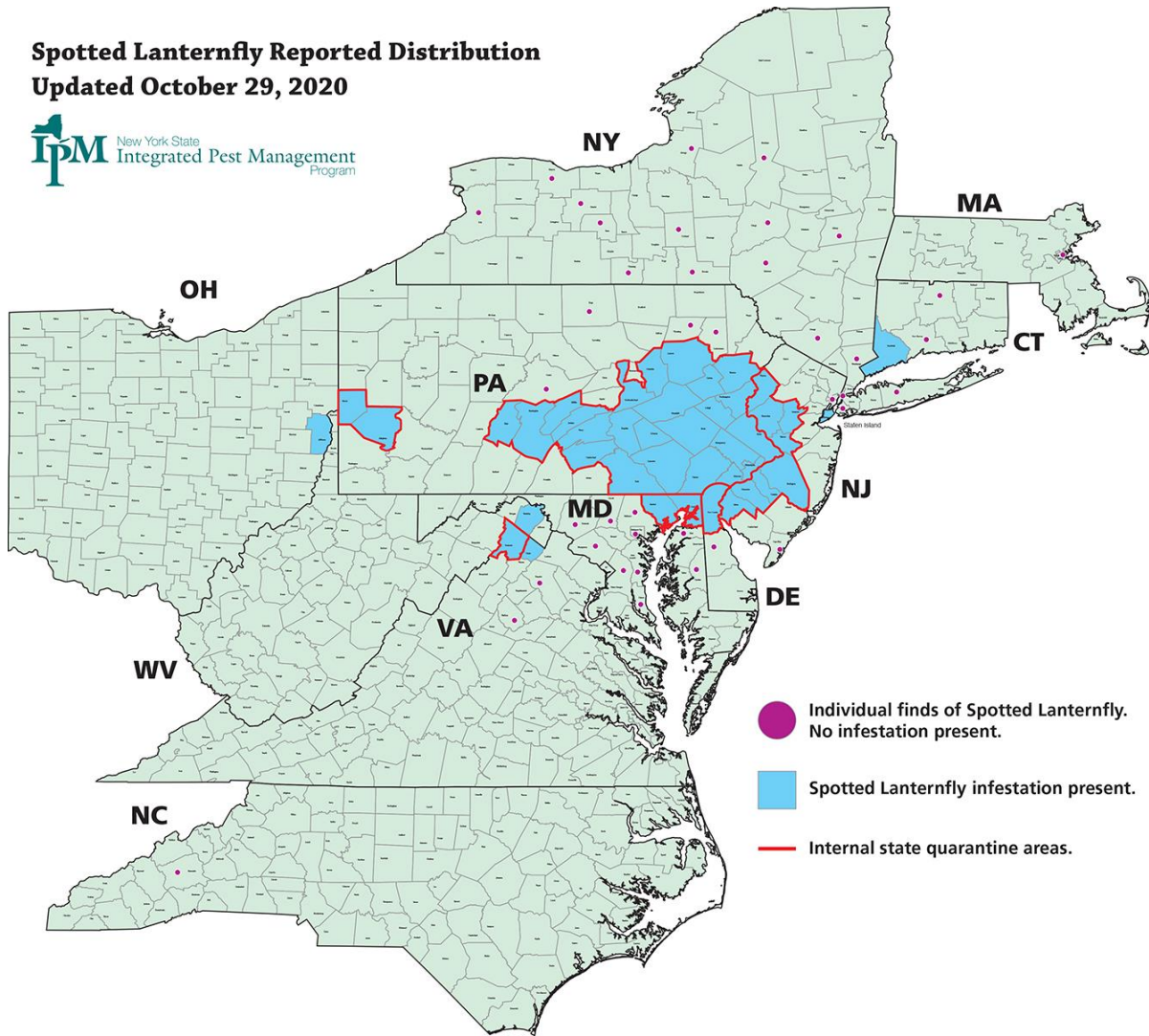
Take a picture: If you aren't sure if what you're looking at is spotted lanternfly you can submit a photograph of any life stage to badbug@ncagr.gov with the subject "Suspected Spotted Lanternfly".

Report a find: When reporting a potential find please include the location & date of the find and if possible, a size reference (e.g. a quarter) when submitting a photo.

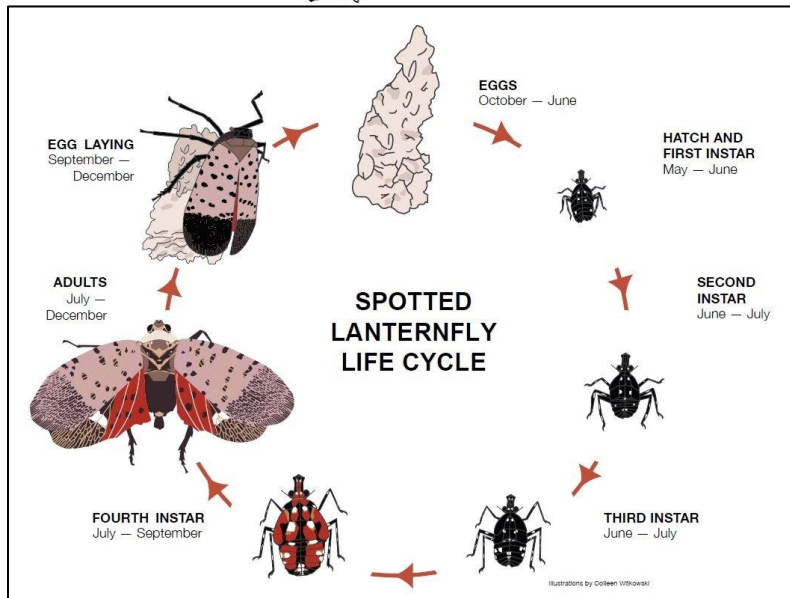
Note: Most of the information gathered for this Pest Watch was obtained from the Pennsylvania Department of Agriculture. Currently, 26 counties in Pennsylvania and portions of Delaware, Maryland, New Jersey, and Virginia have been placed under quarantine for spotted lanternfly and as of January 2020 the pest has been intercepted in CT, DE, MD, MA, NC, NJ, NY, PA, VA, and WV. Please see the Spotted Lanternfly Known Distribution Map and Life Cycle on the back of the handout.

Spotted Lanternfly Reported Distribution

Updated October 29, 2020



- Individual finds of Spotted Lanternfly. No infestation present.
- Spotted Lanternfly infestation present.
- Internal state quarantine areas.



Please note that the above date ranges are based on Pennsylvania's climate (emergence will likely occur roughly 30 days earlier in North Carolina).