

# PEST ALERT

FDACS-P-01981

Pest Alert created November 2020.

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## Florida Department of Agriculture and Consumer Services Division of Plant Industry

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### *Lycorma delicatula* (White) (Hemiptera: Fulgoridae), Spotted Lanternfly

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#### INTRODUCTION

The spotted lanternfly, *Lycorma delicatula* (White) (Fig. 1), was reported first in the USA in Pennsylvania in 2014 and has spread since then to parts of at least seven other states. Native to China, it has become a significant agricultural and ornamental pest in South Korea and Japan. The spotted lanternfly has a broad host range. Barringer and Ciafré (2020) listed 103 plant taxa on which feeding was observed. It is particularly attracted to apple, birch, black walnut, grapes, maple, poplar, stone fruits and especially, tree of heaven, *Ailanthus altissima* (Mill.) Swingle. Its broad host range makes this pest a significant threat to agricultural and ornamental plants. Tree of heaven, its preferred host plant, has been documented in Florida as far south as Hillsborough County (Wunderlin et al. 2020); however, tree of heaven is relatively scarce in Florida, compared with northern states. Spotted lanternfly can complete development without tree of heaven, but development is slower (Osariyekemwen et al. 2020). The presence of other potential host plants, such as chinaberry and Virginia creeper, put Florida at some risk for establishment of this pest.

Egg masses (Fig. 1e) can be laid on objects other than plant material, such as lawn furniture, homes and vehicles. Thus, this pest can travel to Florida as a hitchhiker using pathways similar to those seen for the brown marmorated stink bug, such as RVs or moving/storage containers. Inspection is important to keep this pest from spreading into Florida.

#### IDENTIFICATION

Adults are large, about one-inch long and a half-inch wide. Adult forewings are tan-grey with large black spots, and the tips have a fine, interlaced black pattern. Adult hindwings are red with black spots at the base and a white band across the middle and black tips (Fig. 1c, 1d). The hind wings are colorful and distinctive but concealed at rest. Younger nymphs are black with white spots, and older nymphs are black and red with white spots (Fig. 1a, 1b). The egg masses are distinctive (Fig. 1e). Thirty to 50 eggs are encased in material that dries to the consistency of dried mud. Egg masses can be attached to any surface. The completed egg mass is typically grey and can be one to two inches long.

Be on the lookout for this pest and its egg masses, which can be found on objects and plant materials imported into Florida from infested states. There are no Florida insects that resemble this species in size and color pattern. Members of the public can send a photo to the DPI Helpline (number listed above) for initial screening that could eliminate unnecessary shipping expenses. For samples, please complete the form on our website and include it with the insect sample [www.FDACS.gov/DPIsamples](http://www.FDACS.gov/DPIsamples).

#### REFERENCES

- Barringer, L., and Ciafré, C.M. (2020).** Worldwide feeding host plants of spotted lanternfly, with significant additions from North America. *Environmental Entomology* 49(5): 999-1011.
- Osariyekemwen, U., Keller, J.A., Johnson, A., Long, D., Walsh, B., and Hoover, K. (2020).** Spotted lanternfly (Hemiptera: Fulgoridae) can complete development and reproduce without access to the preferred host, *Ailanthus altissima*. *Environmental Entomology* 49 (5): 1185-1190.
- Wunderlin, R.P., Hansen, B.F., Franck, A.R., and Essig, F.B. (2020).** Atlas of Florida Plants <http://florida.plantatlas.usf.edu/>. (Last accessed 26 October 2020).





**Figure 1. Life stages of the spotted lanternfly: (A) early instar, (B) late instar, (C) adult at rest, (D) adult with wings spread and (E) fresh egg mass.**

Photos by Lawrence E. Barringer, Pennsylvania Department of Agriculture and Erica Smyers, Pennsylvania State University, Department of Entomology, adapted by C. Andy Boring, USDA.