

Spotted Lanternfly: A Big Pest on our Doorstep



Spotted lanternfly was first confirmed in Pennsylvania in 2014



Might have been introduced in 2012 on infected nursery stock, its native range is in Asia

Spotted lanternfly can feed on over 70 different host species (hardwoods, fruits, vegetables, and hops)



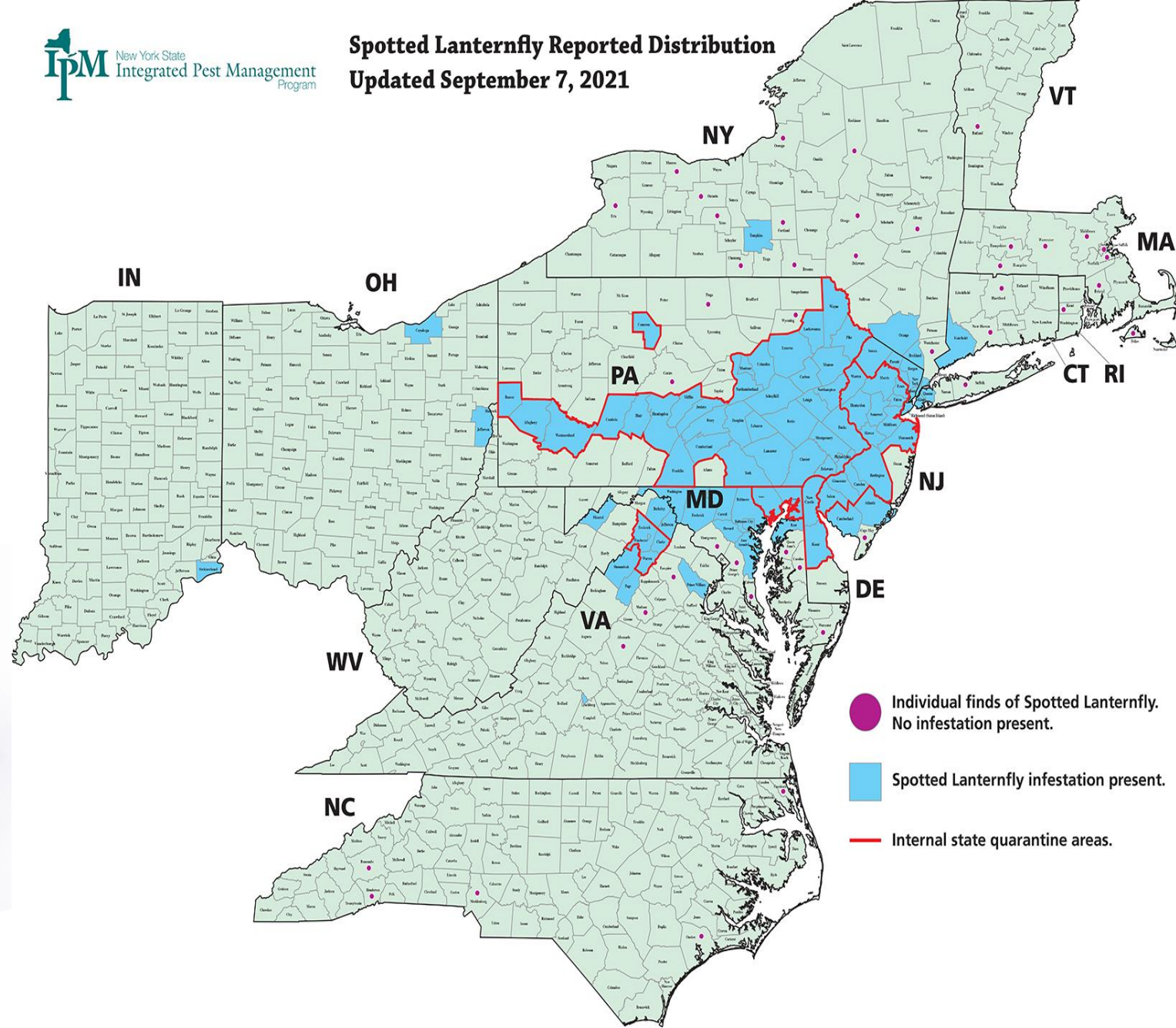
Their preferred host is the tree of heaven

Vineyards also suffer from SLF infestations



Spread has escaped PA at this point

I love New England in the fall,
don't you?



Spotted lanternfly found in Indiana

The Indiana Department of Natural Resources is alerting that the spotted lanternfly, an invasive pest, has been found the farthest west yet.

July 26, 2021
Posted by Lydia Mandell

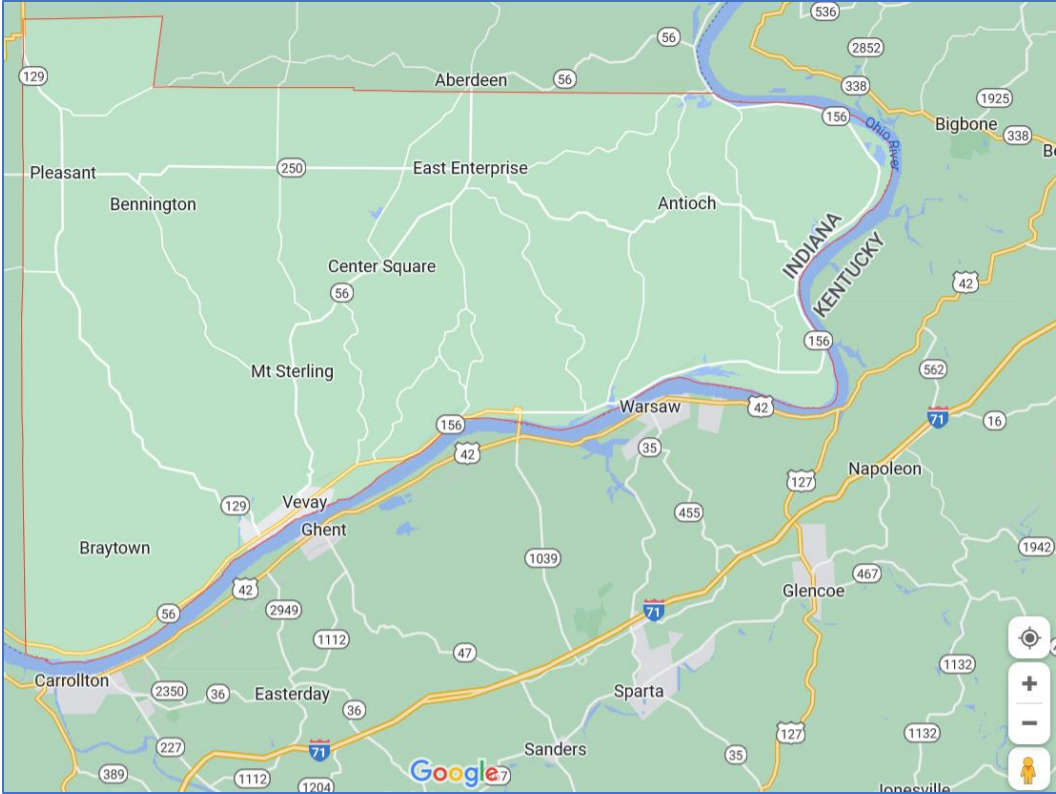


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Pests

Spotted lanternfly (*Lycorma delicatula*) was found in Indiana for the first time in Switzerland County earlier this week, the farthest west the insect has been found. This federally regulated invasive species has a detrimental impact upon plant growth and fruit production, especially in vineyards and orchards.

A homeowner in Vevay contacted DNR’s Division of Entomology & Plant Pathology (DEPP) with a picture that was taken outside his home of a fourth instar, or developmental stage, larvae. DEPP staff surveyed the site and discovered an infestation in the woodlot adjacent to a few homes in the area. The site is within 2 miles of the Ohio River and the Markland Dam. DEPP and USDA are conducting an investigation to determine exactly how large the infestation is and where it could have come from, as well as how to limit the spread and eradicate the population.



The invasive spotted lanternfly was found in Kansas. Here's how to help stop them from spreading.



Greg Williams

Topeka Capital-Journal

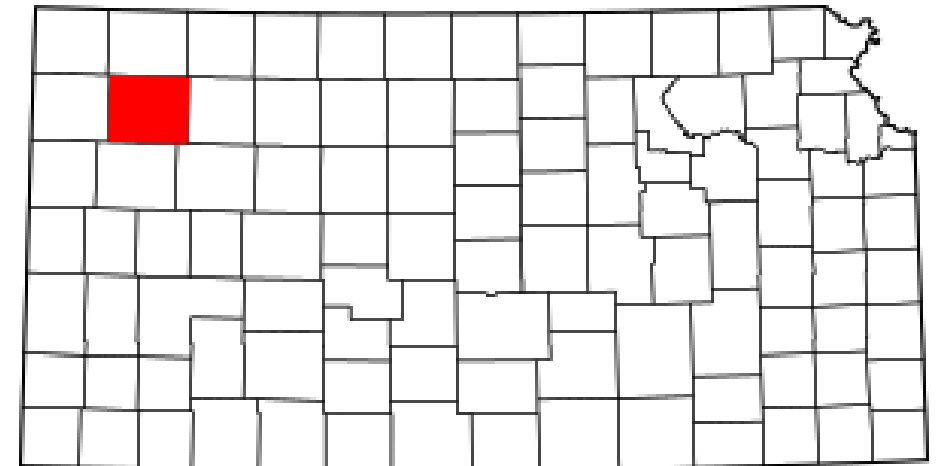
A 4-H student attended the Kansas State Fair to give a presentation on a bug. The effort [triggered a state and federal investigation](#).

The spotted lanternfly is an invasive species wreaking havoc to agriculture on the East Coast, especially across Pennsylvania and New Jersey.

The student found the bug in Thomas County in western Kansas, where it most likely had arrived by hitchhiking onto a camper.

Here's what you need to know about the spread of the spotted lanternfly, how it could impact Kansas and what's being done to stop it.

More: [Kansas student's state fair entry triggers a federal spotted lanternfly investigation](#)



Spotted lanternfly is a Hemipteran, aka a “true bug”



This order also includes cicadas, stink bugs, aphids, bed bugs, leafhoppers, and scale insects

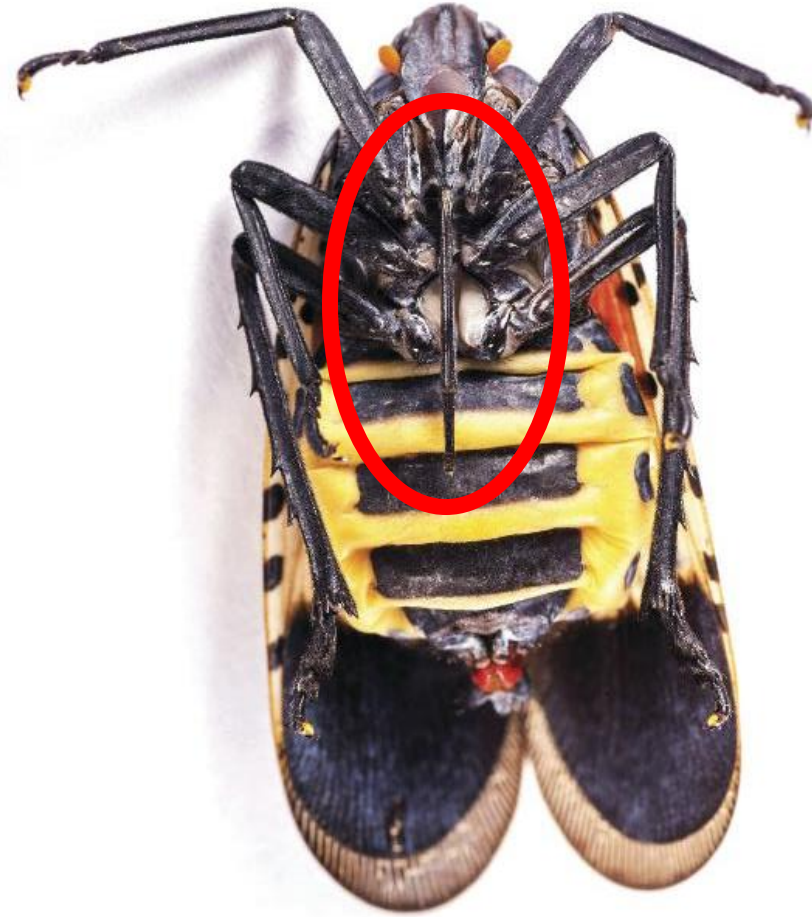
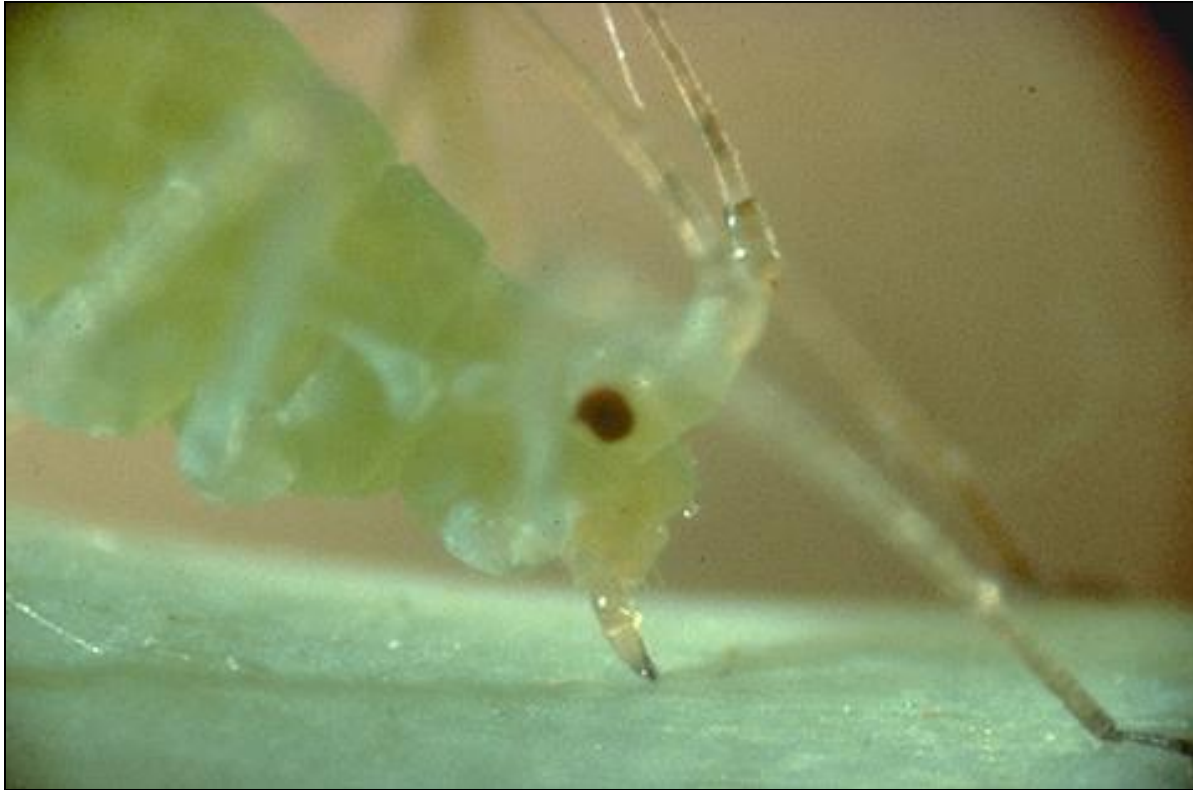
Specifically, they are part of the Fulgorid planthopper group, also known as the lanternflies



This family is mainly tropical, with many extravagant members- we only have two other species that live in Kentucky



All true bugs have a piercing-sucking mouthpart, which works like a needle



This adaptation ensures they have an all liquid diet

True bugs also develop as nymphs when young



E. Swackhamer



PA Department of Agriculture



PA Department of Agriculture



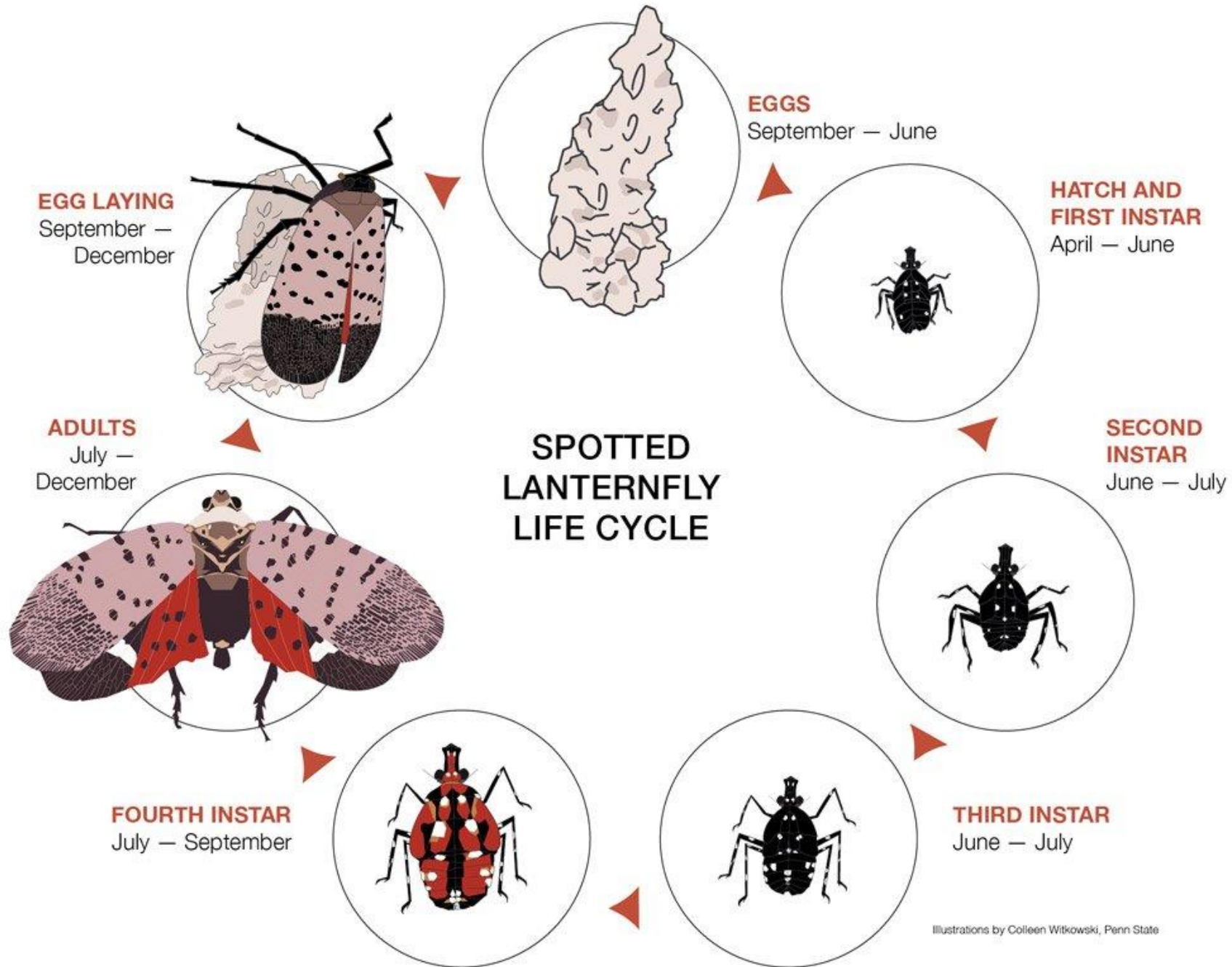
PA Department of Agriculture



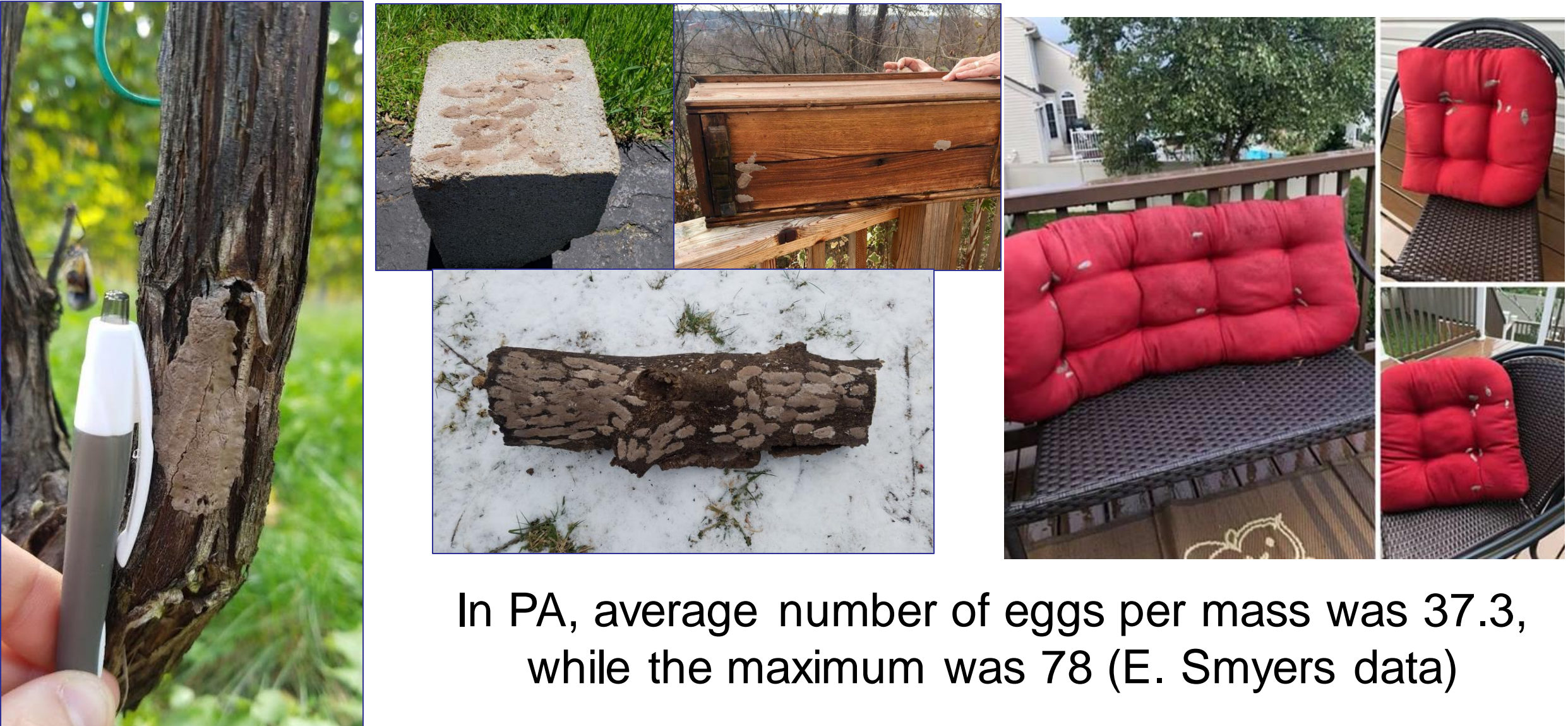
PA Department of Agriculture

- A. Egg masses
- B. Early nymph
- C. Late nymph
- D. Adult, wings closed
- E. Adult, wings open

Insect sizes have been enlarged to show detail.



Invasive attributes: Eggs are laid on any hard surface (vines, trunks, posts, stones, houses, lawn furniture, etc.)



In PA, average number of eggs per mass was 37.3, while the maximum was 78 (E. Smyers data)

Old egg masses



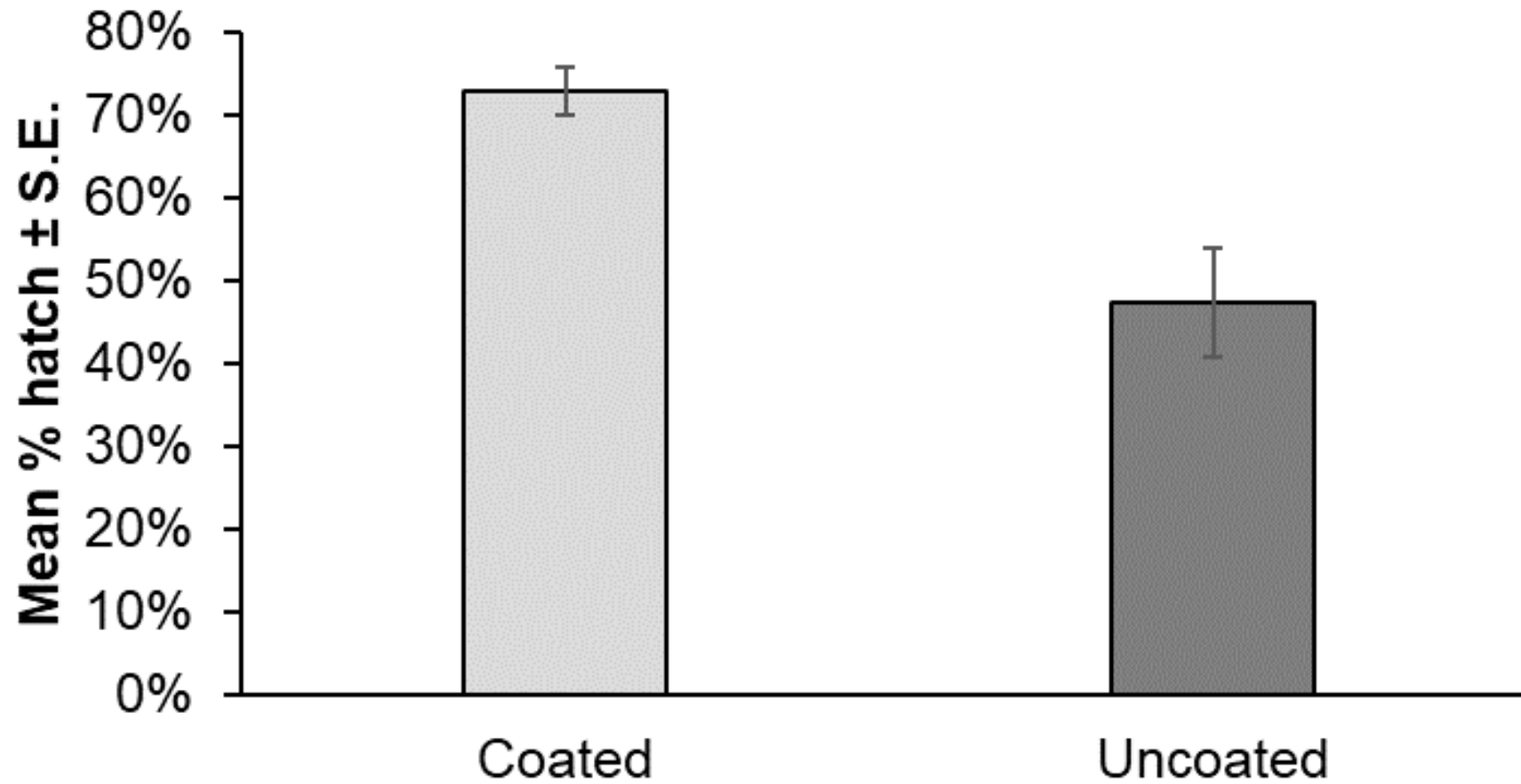
New egg masses



Females will also coat eggs with a white “epoxy”



Coating on surface increases hatch rate



Data courtesy of Erica Smyers

Like other invasives, spotted lanternfly has few natural enemies in the USA



This one attribute that has allowed them so much success here

That isn't to say that nothing will eat them, mantids, spiders, wheel bugs and others will



There are also reports of them being consumed by chickens, garter snakes, and yellowjackets

Not only a crop pest: Much like brown marmorated stinkbug they can be a nuisance pests as well



Some adults may end up in homes where they will perish and backyard activities can be ruined

Spotted lanternfly populations are thick!



Video by Christopher Jordan

As true bugs feed, they excrete sugar water waste



This is called honeydew and can lead to loss of vigor and black sooty mold problems



Sooty mold – a nuisance problem



Barbara Bowen

SLF honeydew production is much more spectacular than with aphids



Video by Erica Smeyers

KY Next Steps: Be on the lookout for trees of heaven in your area



These invasive trees are problematic on their own and serve as the primary host for the spotted lanternfly

Be aware that traps will be used for monitoring of this pest



Sticky band traps wrapped around the bases of trees of heaven serve as one monitoring tool

Sticky band traps can be indiscriminate in what they snare unfortunately





Tree of heaven may also be used as a “trap tree” through insecticide treatments



Small trees are removed from an area, leaving large trees behind which are then injected with an insecticide to kill SLF that later feed

Kentucky will be able to participate in this if/when the pest shows up



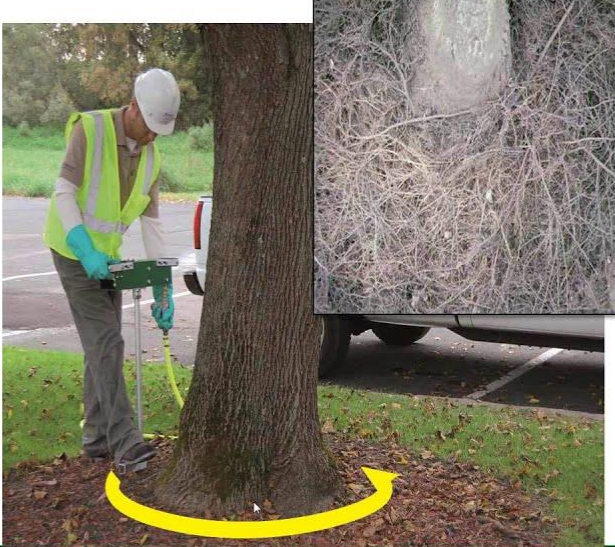
Soil Application

Transtect™

Rates

**0.6 oz packet
per 5 – 17
inches DBH**

**0.6 oz packer
10-17 ft shrub
height**



Rainbow Treecare
Scientific Advancements 16

There is a 24-C label in place for an insecticide known as Transtect, a dinotefuran systemic injection

Kentuckians should be prepared for the possible impacts on their lives as well



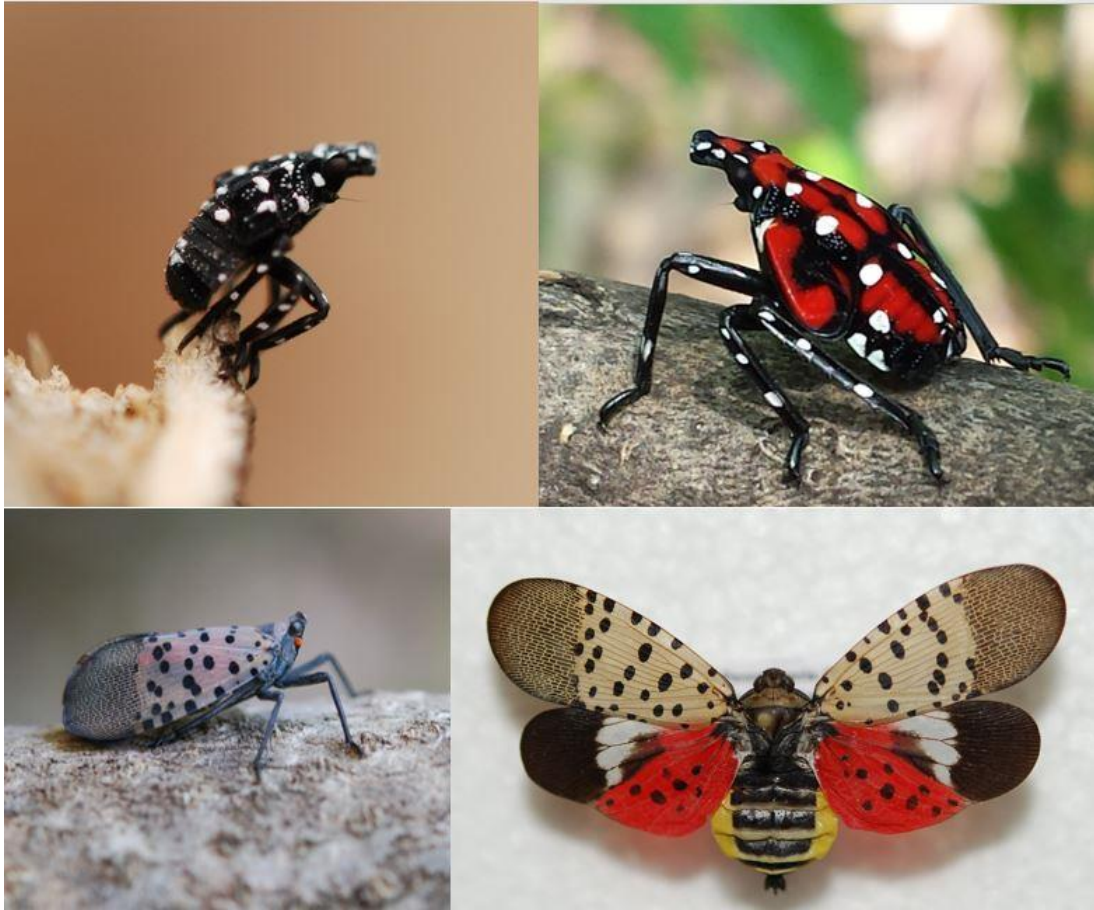
Infested areas can be subject to quarantines, in Pennsylvania there are permits for people who drive between infested and un-infested counties

This is also an expensive pest, PA estimates that SLF will cost around \$300 million dollars and possibly 2,800 jobs



Ag sectors, vineyards, Christmas tree production, and wood product industries are all at risk from direct damage and restrictions in movement

**If you think you have spotted one of these pests,
please obtain a sample or a photo**



We can only verify it with the federal government with evidence on hand

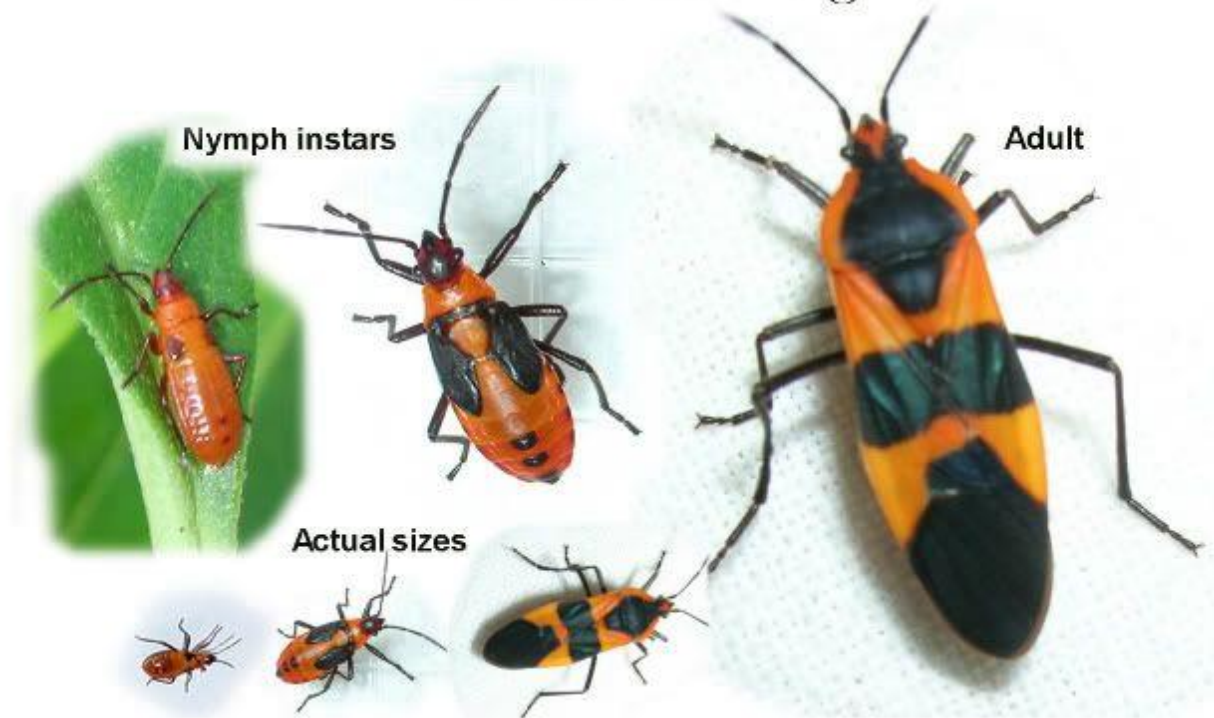


A002 2560x1920 2022/02/21 11:39:43 Unit: mm Magnification: 12.3 x No Calibration





Milkweed Bug



Look for key differences in the ways wings are held, differences in coloration, and size of lookalikes

Questions?



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Let me know if I can
help in any way!