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NC COOPERATIVE EXTENSION

Spotted Lantern Fly Update

The Spotted Lantern Fly is an invasive species of insects that feeds on the sap of a broad number of plants. It was first found in Berks County, Pennsylvania, in 2014. An invasive species of tree called Tree of Heaven is a favorite host plant for this insect. Because it will get on other plants such as maples, grapes, apples, hops, and hemp. It has been recorded on over 67 host plants, and as time progresses many new plants will surely be added to this growing list.

This species is thought to be native to China, but has spread to other countries in the Asia region. It was detected in Korea in 2004. The Latin name for Spotted Lantern Fly is *Lycorma delicatula* (White, 1845).

The Spotted Lantern Fly is actually a plant hopper that can walk, jump, or fly short distances. Its long-distance spread is helped by humans who unknowingly move infested material from one location to another. Normally, the egg masses are moved from one location to another hidden-on vehicles, boxes, block, rocks, bricks, and pallets.

The damage is caused by both nymphs and adults when they feed. The insects will suck sap from stems and leaves. This causes a reduction in photosynthesis, and will weaken the plant.

Sometimes, that weakening will cause death to the plant, or at least predispose it to other causal agents that will cause the death.

The feeding will cause honey dew to start forming and sooty mold will grow, further reducing the possible photosynthesis rates and further weakening the plant. Sometimes the feeding will cause the plant to ooze resulting in an odor of fermentation which attracts more insects.

An image of the lifecycle has been enclosed for easy reference to use when scouting.

- Eggs will be laid starting in October through June. The eggs will start hatching in May and will continue until June.
- \checkmark The first instars will be seen from as soon as they hatch, in May until late June.
- ✓ The second and third instar will be here from June until July.
- \checkmark The fourth instar will be in July until September.
- ✓ The adult will be from July through December. These adults will lay eggs in the fall until cold weather kills the adults off.

Then, the cycle starts all over again.

Spotted Lantern Fly adults and nymphs frequently gather, on host plants, in large numbers. The insects are not hard to find when they are on the host plants. To scout for this pest, look at Tree of Heaven, *Ailanthus Altissima*.





Tree of Heaven

This invasive weed is also known as Chinese Sumac, Stinking Sumac, and Tree of Hell. This tree is native to China. The tree resembles Sumac, but the Tree of Heaven's crushed leaves smell like rancid peanut butter. It was brought to Philadelphia in 1784 by an amateur gardener. By 1840, it was commonly available from nurseries. This is a fast growing, deciduous, exotic, invasive tree that is able to germinate and grow in a wide variety of soil and site conditions. It is normally found in waste areas. The tree can reach a height of 80 feet tall and it has become naturalized in most areas. Leaves are pinnately compound with anywhere from 10 to 41 leaflets with smooth leaf margins. *All Tree of Heaven need to be removed in order to minimize the spread of Spotted Lantern Fly.*

