



TREE-OF-HEAVEN

Tree-of-heaven (*Ailanthus altissima*) is by no means a new invader. Native to China, TOH was introduced to North America as a fast-growing ornamental and street tree in the late 1700s when invasive species were of little concern. TOH quickly escaped cultivation and has since become naturalized throughout most of the continental US

This exotic invader spreads so quickly thanks to huge numbers of winged seeds that can be blown in the wind for hundreds of feet. Another way TOH reproduces is by cloning itself! New stems can shoot up from roots of older trees up to 90 feet away, and a cut stump will quickly recover by producing dozens of new sprouts that can grow a 12 feet in a single year. This weedy tree also leaches toxic compounds into the ground from their root system, seeds, and fallen leaves, which inhibit the growth of nearby plants and allows TOH to out-compete native species.

TOH prefers to grow in sunny locations, but can tolerate a wide range of soil and environmental conditions and thrives in disturbed urban environments such as along roads and highways, field edges, and can even germinate in the cracks of sidewalks! You can identify TOH by smooth, light grey bark and long, pinnately-compound leaves which produce a foul odor when crushed, like burnt peanut butter (yuck)!



While the TOH has few natural pests or diseases to worry about in America, the spotted lanternfly, an invasive insect also from China, loves to feed on it. Some research suggests that the insect relies on the toxins this tree produces to make itself unappetizing or even poisonous for predators! Spotted Lanternfly not only feeds on TOH, though, and it is a major pest of fruits like grape vines, apple, and peach trees.

This is proof that letting even one invasive species take over an environment can cause unforeseen consequences in the future; without the introduction of TOH, the spotted lanternfly would not have been able to invade! Management and control efforts are important to limit the damage of this species.

QUICK FACTS

- Native to China
- Brought to North America as an ornamental in the late 1700s
- Light gray bark
- Long, pinnately-compound leaves
- Leaves smell like burnt peanut butter when crushed
- Thrives in disturbed environments
- Can leach toxic compounds into the soil that inhibit the growth of nearby plants

