

Tree-of-Heaven

Invasive Plant Fact Sheet

DESCRIPTION

Tree-of-heaven (*Ailanthus altissima*) grows quickly and can ultimately reach up to 80-100' in height.

Leaves are pinnately compound (central stem with leaflets attached on each side). When crushed, the leaves and all plant parts give off a strong, offensive odor.

Fuzzy, reddish-brown twigs, which easily break to expose the large, spongy, brown center.

Flowering occurs in late May through early June. Fruits (samaras) hang in clusters, turn from green to dull orange/brown color, and are wind dispersed.

WHY IS IT BAD?

Allelopathic chemicals in plant leaves, roots, and bark can limit or prevent the establishment of other plants. The plant's weak wood can cause property damage.

DISTRIBUTION AND SPREAD

Female trees are prolific seeders, with the potential to produce more than 300,000 seeds annually. Sprouts as young as two years of age are capable of producing seed. Aggressive root suckers also extend the spread as far as 50' from the parent tree, creating dense colonies of established trees.



Tree-of-heaven ID
Fruit/seed pods (left) form dense clusters on female plants in mid summer before dispersing by wind



Close up of leaves. Thumbs at base of leaves can be helpful in identification

MORE INFO

Correct identification is critical; some native trees look similar, including staghorn sumac, walnuts, and ash. Staghorn sumac is distinguished by its size (10-20'), serrated leaf edges, and upright clusters of small fuzzy fruits. Walnuts produce large nuts and leaves lack glands and the foul odor.

Tree-of-heaven is not shade tolerant. It is particularly invasive in urban landscapes, right of ways, roadsides, and woodland edges. It establishes quickly, colonizing primarily disturbed and neglected areas.

The plant is resistant to pollution, can tolerate very poor soils, and can even grow in cracks in pavement, building foundations, and other human-created habitats.

Spotted Lanternfly, an invasive pest, is particularly attracted to tree-of-heaven, making this plant a concern for multiple reasons.



To learn more about invasives in Medford, scan the QR code or visit <https://bit.ly/02155Invasives>

CONTROL METHODS

Tree-of-heaven readily forms clonal colonies with interconnected root systems. Established trees will typically respond to manual control efforts with aggressive suckering across the root system (cutting it down will cause it to grow new trees along the roots). Manual removal of the entire root system may be possible with young trees. In most cases, chemical control is necessary to prevent regrowth.

For chemical control of small- to medium-sized trees, a licensed professional should apply triclopyr ester in an oil carrier using a basal bark application. Removal can take place after canopy dieback.

Larger trees can be targeted with a hack and squirt/drill and fill application directly into the phloem tissue. Hack and squirt is most effective when professionally applied with a concentrated water-based triclopyr amine solution.

(If a tree is cut down before it is killed, foliar applications of water-diluted triclopyr amine with a surfactant can be applied to root suckers during the summer months. Repeated applications may be necessary to suppress further regrowth. Carefully read the label; the label is the law.)

DISPOSAL

Tree-of-heaven root material may be viable if it's not disposed of properly. Make sure seed pods (samaras) and roots are incinerated or bagged and trashed. Wood chips from tree-of-heaven trunks are safe to use without risk of regrowth.



Infestation of young plants



Close up of bark

Keep Medford Beautiful is a community effort initiated by Mayor Breanna Lungo-Koehn to organize local volunteers to help clean up and beautify the city's streets and public spaces.



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