

Tree of Heaven

Ailanthus altissima

Description

Extensive cloning; allelopathic properties present. Introduced as an ornamental because it grows quickly and is very attractive. It has a medicinal history in Asia where it has been used as an astringent, antispasmodic and parasiticide. Plant extracts are also used as herbicides. It is also a food for honeybees worldwide.

Habit

Deciduous small to large tree; 12-20 m (40-65 ft) tall and 60-100 cm (24-40 in) in diameter; crown wide-spread with multiple branches.

Leaves

Alternate, pinnately compound with 11-30 lance-shaped leaflets, leaves 30-90 cm (1-3 ft) long, 1-5 small gland tipped teeth near the base



of each leaflet, dark green above and pale green below, turn yellow in fall; smell like rancid peanut butter when crushed.

Stems

Twigs very stout, light to dark brown, smooth with large V-shaped leaf scars; bark thin, gray to brownish gray, smooth with shallow fissures appearing on older trunks.

Flowers

Small, yellow-green in color, 5 petals; borne in dense clusters near ends of upper branches, male and female flowers on different plants, pollen has an offensive odor; blooms in late spring.

Fruits and Seeds

Two-winged, papery, flat samara; reddish when ripe; develop in clusters on female trees in fall, persist in winter, germinate readily, dispersed by wind, birds and water.

Habitat

Shade intolerant; thrives in poor soils; found in disturbed soils, fence rows, fields, roadsides, woodland edges, forest openings and rocky areas; very fast growing.

Reproduction

By seed and vegetatively via root suckering, up to 350,000 seeds produced annually by a single plant.

Similar

Crushed leaves or broken stems of native sumacs (*Rhus* spp.); walnuts (*Juglans* spp.) and ash (*Fraxinus* spp.); lack rancid peanut butter aroma; leaves lack gland-tipped teeth at base.

Monitoring and Rapid Response

Monitor edges, paths; hand pull seedlings before taproot develops (

Credits

The Michigan Natural Features Inventory (MNFI) has partnered with MISIN to provide the information in this fact sheet. Species images and/or information were used with permission from "A Field Identification Guide to Invasive Plants in Michigan's Natural Communities" and "A Field Guide to Invasive Plants of Aquatic and Wetland Habitats for Michigan."