

## Tree-of-Heaven

*Ailanthus altissima* (Mill.) Swingle

**Alternate Latin names:** *Toxicodendron altissima* Mill., *Albonia peregrina* Buchoz, *Ailanthus glandulosa* Desf., *Ailanthus altissima* Swingle, *Ailanthus peregrina* Barkley

**Alternate Common Names:** Ailanthus, Chinese Sumac, Copal-tree, Stinking Shumac

- tree, deciduous, 40'-100' tall; rapidly growing, with few branches; spreading lacy crown
- tree has foul odor of rancid nut butter, particularly in leaves and male flowers
- twigs very stout with large horseshoe-, heart- or shield-shaped leaf scars; old twigs hairless
- leaves alternate, compound; 1'-4' long with 11-41 leaflets each 2"-6" long
- leaflets have 1-5 coarse teeth on each leaf margin at the base; otherwise not toothed
- each leaflet tooth has a green, circular gland at the end of a vein or veinlet
- fruits have 1 seed centered in an oblong 1 1/2" papery wing; flat or spirally twisted

Tree-of-Heaven is distinguished by its unpleasant smell and the huge, alternate leaves each composed of a large number of pairs of gland-toothed leaflets. The winged fruits of Tree-of-Heaven, green at first, go through a progression of colors (yellow, pinkish or orange, red) until ripening red-brown. The fruit masses hang down in the fall unlike the upright, red "cones" of Sumacs. Some trees lack the showy, winged fruits because they produce only male flowers.

Tree-of-heaven may resemble native trees and shrubs with alternate, compound leaves. Unlike Walnuts, Staghorn Sumac, or Smooth Sumac, Tree-of-Heaven lacks serrate leaf margins. Tree-of-Heaven has a main trunk rather than a straggly, shrubby branch pattern. The bark is smooth. In autumn, the leaves all drop at first frost. A large amount of fruit may remain in the winter. Tree-of-Heaven is common in urban settings. Its roots sprout vigorously (even through cracks in sidewalks) up to 50' from the mother tree. Though intolerant of shade, it may seed into mature forests and fill openings where native trees have died. Sprout clumps may exclude native vegetation from forest edges or meadows through shading and toxins from the leaf litter.



*Text and photos by: Charlotte Pyle, October 2002*  
*Helpful review provided by: Lillian Willis*