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Vanquish Invasive Intruder Trees

by Jeanne Rose, UC Master Gardener

I recently noticed an intruder in one of my flowerbeds. At first glance, I thought it was a pecan tree from seed planted by bluejays; but as I observed it over a few days, I noticed something about this scoundrel that was different from any of the pecans I had previously eliminated. It was growing at a much faster pace, the pinnate leaves were considerably longer and contained more leaflets than a pecan leaf, and the tip of the new growth was red. I quickly decided to stop the invader in its tracks. When I pulled it, I discovered it had no taproot and handling it left an unpleasant, almost sickening, odor on my hands. Pecan seedlings develop taproots, and the odor from them is less offensive.

This intruder was the Tree of Heaven (some call it the Tree from hell). Its botanical name is Ailanthus altissima. Since there are no ailanthus trees within a mile or more, as the crow flies from my yard, I knew that the seed had to have been deposited by a bird.

This species is widely distributed across the United States and in nearly 40 of California's 54 counties. This native of China was introduced into the U.S. in the late 1700s as a fast growing shade tree. It is an attractive tree, but it spreads by seeds and creeping roots, which produce many suckers, and then before too long you have a dense, impenetrable thicket of trees.

In the 1800s the Tree of Heaven became widely naturalized across the North American continent. It has become established in urban areas to reclaimed surface-mined areas, wastelands and semi-natural habitats which had been disturbed. It reproduces successfully on impoverished soils and in harsh environments and is a component of the upper canopy in eastern hardwood forests, where it apparently spreads by re-sprouting after disturbance caused by harvest of trees. It crowds out native species, damages pavement and building foundations in urban areas.

It has become such a problem (Tree from hell) that it is included on the invasive-plants list developed by the California Invasive Plants Council. Other agencies dealing with this pest are Federal and State governments, Universities and International Organizations, including The Nature Conservancy.

As one might expect because of its wide distribution, ailanthus had adapted to climates ranging from temperate to subtropical and humid to arid, and a wide range of precipitation - from 7 to 90 inches annually. It tolerates a wide range of soil textures and pH levels. It can be drought hardy and it can tolerate flooding.

Ailanthus produces yellowish-green flowers in large panicles at the ends of new growth in the spring. The male and female flowers are borne on separate trees. Male trees have three times more flowers than female for pollination and these flowers emit a disagreeable odor, which attracts numerous insects and aids in pollination. Female trees produce the clusters of seed, which ripen in the fall.

Individual seeds are enclosed in the center of thin, oblong wings well adapted for wind dispersal. Seeds of the female usually remain on the tree through the winter and then are dispersed any time through the following spring. Ailanthus is a prolific seeder, with the greatest seed production being on trees 12-20 years old.

There are many clumps of Ailanthus altissima throughout Tulare and Kings counties. Our office receives calls from home gardeners whose neighbors have the tree and it invades their yard. It is very difficult to rid this tree from your property once it is established. Applications of glyphosate (Roundup) and triclopyr (Garlon) work best when applied in the late summer and early fall, and even then repeated applications would be needed. Always follow all label instructions and realize that both of these products would do damage to desirable landscape plants, if applied improperly.

Be on the alert for this sneaky intruder into your yard and do not allow it to develop a stronghold. If you are uncertain and want to make a positive identification, search the internet for photos of this tree or take a sample to the Master Gardener Office for assistance.

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