Invasive Plant Alert[1]

Japanese corktree
Phellodendron amurense Rupr.

Japanese corktree was introduced from east Asia in the mid 1800's and was reported naturalizing in forests around New York, Philadelphia, and Boston 50 years later. Since then, the tree has been reported invasive in several states, including Massachusetts, New York, Pennsylvania, and Virginia. Corktree is problematic because it out-competes native tree and shrub species in forested areas.

Figure 1. Patrick Bean, Oregon State Univ., Bugwood.org

Where to Look

Corktree is invasive in parks and moist natural areas, especially around the cities of its initial introduction, where it has escaped from plantings. It spreads quickly into disturbed forests and wooded areas, where it can form dense stands with shelf-like branching that shade out competing species.

Identifying the Plant

Corktree is a medium-sized tree growing 35 to 50 feet tall and nearly as wide with shelf-like branching. The bark is spongy or corky and has a distinctive bright yellow layer of inner bark. On younger trees the bark is golden brown while older trees have gray-brown, ridged, and furrowed bark.

Figure 2 Inner bark. Patrick Breen, Oregon State Univ., Bugwood.org

The leaves are opposite, pinnately compound and composed of 5-13 dark green leaflets that turn bright yellow in the fall. The leaves are 10"-15" in length, with leaflets of 2.5"-4.5" in length. The leaves emit a citrusy smell when crushed.

The tree is dioecious and produces small flowers in May or June. From mid-June to mid-July female trees produce abundant clusters of small green drupes that turn black in late summer to fall. The fleshy fruits persist on until early winter.

Native ash trees (*Fraxinus* spp.) have compound leaves and furrowed bark that resemble corktree. Black walnut, Elderberry, Mountain ash, and Sumac species also share some characteristics with corktree.

How to get rid of it?

Control is difficult and planting of this tree should be discouraged. Corktree control requires a long-term strategy with monitoring and follow-up because its seeds remain dormant in the soil for several years and the plant re-sprouts vigorously. Female trees should be prioritized for control, and can be marked in the fall when fruits are present.

The most effective management of corktree is through a combination of cutting or girdling with application of a systemic herbicide. A combination of triclopyr and glyphosate has proven effective.

Figure 3 Patrick Breen, Oregon State Univ., Bugwood.org

Resources

Plant Conservation Alliance's Alien Plant Working Group Least Wanted:
http://www.nps.gov/plants/alien/fact/pham1.htm

Forest Service:
http://www.na.fs.fed.us/fhp/invasive_plants/weeds/amur-corktree.pdf

[1] This species has been identified as a potential or emerging threat to natural areas in the mid-Atlantic region

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