PLANT ALERT

Public Gardens as Sentinels against Invasive Plants

Amur corktree

Phellodendron amurense

ISSUED SEPTEMBER 2023

Amur corktree has been identified by the PGSIP working group as a plant of concern due to a growing number of botanic gardens and arboreta reporting on its ability to escape from cultivation.

Public gardens across North America are sharing their horticultural expertise to document cases of plants escaping from cultivation. The goal of this alert is to increase awareness of gardens' observations about Amur corktree's behavior within their properties and to recommend actions to reduce its capacity to spread. For the most current data on this taxon, visit the **PGSIP website**.



Todd Jacobson, The Morton Arboretum

Recommended Actions

PGSIP urges these next steps for propagators, nurseries, landscape architects, invasive plant councils, and public gardens

- Remove fruit-bearing trees
- Eradicate spontaneous populations
- Develop and evaluate cultivars for reduced seed fertility
- Plant and sell only non-fruit bearing Amur corktrees
- Increase public garden reporting on Amur corktree

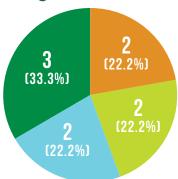
References and Links

- **O** PGSIP
- **10** Woody Invasives of the Great Lakes Collaborative
- **3** The Morton Arboretum
- **4** EDDMaps

Data from PGSIP Gardens

Nine out of 25 gardens have used the PGSIP standardized ranking system to rank Amur corktree according to its ability to escape from cultivation. A regional trend is emerging with gardens reporting from the following states: Missouri, Illinois, Ohio, New York, Massachusetts, Michigan, and Ontario (Canada). More gardens are encouraged to participate to further understand this trend. Click on the map below to see updated records and locations.

How gardens ranked Amur corktree



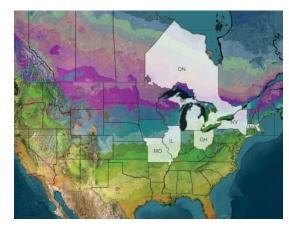
Number and percentage of gardens that assigned each program category

Assesed as Invasive

Invasive

Potentially Invasive

Watchlist



Click map for data dashboard

Amur corktree Phellodendron amurense



Amur corktree leaf



Kurt Dreisilker, The Morton Arboretum Sapling, inner yellow bark



Leslie Mehrhoff UCONN, bugwood.com

Background Information^{2,3,4}

- BRIEF DESCRIPTION: Tree with short trunk and spreading branches. Thick, corky bark. Fruit 0.25-0.5 in. diameter, green maturing to black.
- HARDINESS ZONES: 3-7.
- NATIVE RANGE: East Asia
- STATUS: Regulated in IN, MA, MD, ME, MN, NH, NY, WI with some exceptions for cultivars.
- MALE CULTIVARS*: Eyestopper and His Majesty
- POTENTIAL IMPACTS: Allelopathic, suppresses regeneration of native trees, displaces native shrub and herbaceous layers.

Habitat²

Amur corktree typically invades disturbed woodland habitats, including roadsides, forest edges, woodlots, unmanaged areas, and forest openings. Its shade tolerance allows it to grow in mature upland and lowland forests if seed is introduced.

Unique Features²

Mature black fruit

Amur corktree is similar in appearance to other trees with compound leaves, including tree-of-heaven (Ailanthus altissima), black walnut (Juglans nigra), yellowwood (Cladrastis kentukea), and Kentucky coffeetree (Gymnocladus dioicus). While all of these species have alternately arranged leaves, the leaves of Amur cork tree are opposite. The yellow inner bark is also unique to Amur corktree. When crushed, the leaves have a turpentine-like aroma.

Reproduction and Growth Rate¹

Amur corktree seeds are spread over long distances by birds that eat the fruit. Though primarily considered dioecious, trees considered staminate have been observed sporadically producing fruit at some gardens, sometimes only on isolated branches.

*Describing Amur corktree as polygamodioecious may more accurately reflect its reproductive biology and have important implications about the regulation of corktree cultivars.

Public gardens sign up for PGSIP here.

Share feedback on this Alert.

Not a public garden? Share data here.

PGSIP is guided by a multiorganizational Working Group and supported by the USDA National Institute of Food and Agriculture, Crop Protection and Pest Management Program through the North Central IPM Center (2022-70006-38001) and the Richard King Mellon Foundation.



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