

Introducing...Katsura!

By Ashley Reichard



A Japanese and Chinese native, the katsura tree, is an expanding species making its way into the Midwestern landscape. This tree is special in many ways, one being that the famous Michael Dirr notes the katsura as one of his favorite trees. Many of us have come to trust Dirr's knowledge, so this should be the only seal of approval we need. However, let us dive in more to see what else makes this tree so special and why it is worth including in our plantings.

Monotypic you say?

For those who don't know, monotypic refers to a taxonomic group that only contains one subdivision and no further subspecies. To further illustrate this concept, consider other common monotypic species like the Kentucky coffeetree (*Gymnocladus dioica*) and the ginkgo (*Ginkgo biloba*). Or, if you prefer a mobile species comparison, consider the red panda, armadillo, and honey badger. The primary benefit of incorporating monotypic plants in the landscape is that there are fewer species which mean fewer opportunities for pest and disease issues. Let's quickly compare this to a more robust genus. Lindsey Purcell with Purdue Extension best highlights one that we can all understand:



New katsura leaves. Photo credit:
Gary Johnson

"One of the most popular and over-planted tree species are the maples (Acer sp.) which have over 125 species and over 200 known pests!"

By including monotypic species in our planting projects and reforestation efforts, we are in turn diversifying our canopy and creating a more resilient urban forest. Going back to our focus of this article, the genus is *Cercidiphyllum* which contains two species of plants that are both known as

katsura. The two species included in this genus are *Cercidiphyllum japonicum*, or our "standard" katsura, and *Cercidiphyllum magnificum*, or the magnificent katsura. Both of these katsura trees are the only members of the family Cercidiphyllaceae.

Katsura Morphology

Katsura is a small, deciduous tree that is typically 40 to 60 feet tall and 20 to 30 feet wide at maturity. This tree is pyramidal in form which often develops into a soft, round form with age and best suits USDA Zones 4 to 8. Katsura can be both single (*C. magnificum*) and multi-stemmed (*C. japonicum*) and features smooth gray bark that can become flaky or slightly shaggy over time. The small, rounded to oval shaped leaves are similar to that of an eastern redbud (*Cercis canadensis*). In spring, leaves emerge with a reddish-purple color and soon after, tiny red flowers emerge. Although not particularly showy, the male trees produce a red colored flower and female trees produce a green flower. In summer, the leaves develop a greenish-blue tint and turn in the fall to gorgeous shades of gold, orange, and red. One of the most notable aspects of fall leaf change is the sweet aroma that emits. It is commonly described as a caramel scent but has also been described as smelling of burnt sugar, cinnamon, cotton candy, or ripe apples (yum)!

With all of these descriptions in mind, you can likely tell that the katsura is an excellent specimen tree that adds color and interest to a landscape. That is, as long as you take into consideration that they need full sun to partial shade and moist, well-drained soil. Dirr does note that a more acidic soil can help this tree produce better fall color.



Katsura fall leaf color. Photo credit: The Morton Arboretum





Katsura bud. Photo credit: The UMN UFore Lab (trees.umn.edu)

Limitations of Katsura in the Minnesotan Landscape

While there are many benefits of katsura, it is worth noting some limitations of this plant. Katura are known for not tolerating drought conditions, so watering is key for establishing and maintaining this plant. When conditions are suitable for katsura, it can be a fast- to medium-growing tree, but harsher sites elicit a slower growing specimen. As long as you can provide ample water, you can mitigate leaf scorch issues on this tree. Another climate consideration of the katsura tree is that is has been found to be intolerant of late frosts.

In regards to supporting our native wildlife, the non-native katsura will not benefit our landscape in the same way native species will. If you are looking for a similar tree, the eastern redbud (*Cercis canadensis*) provides a similar foliage color but attracts many native pollinators with its rosy pink flowers and songbirds will gather to the site for the small seeds.

Katsura	 Mature katsura leaves. Photo credit: Gary Johnson	 Katsura form. Photo credit: Gary Johnson	 Katsura bark. Photo credit: Missouri Botanical Garden
Eastern Redbud	 Eastern redbud leaf. Photo credit: UMN UFore Lab (trees.umn.edu)	 Eastern redbud form. Photo credit: Ashley Reichard	 Eastern redbud bark. Photo credit: Ashley Reichard

Katsura Uses

Katsura wood is known as being soft and light in weight making it a suitable option for cabinetry, paneling, and as game boards. One notable historic use has been for the *goban*, or a board for the Japanese game of Go. For those unfamiliar with Go (I definitely was unfamiliar), this is the oldest known-board game continuously played for more than 2,500 years. Overall, due to its commercial use, *C. japonicum* is currently listed as near threatened on the endangered species list.

Notable Cultivars

If katsura sounds like a planting option you wish to incorporate in the Midwestern urban landscape, it is worth noting a few cultivars. Two weeping varieties are *C. japonicum* 'Pendulum', or pendulous katsura, and *C. japonicum* 'Morioka Weeping' which is slightly smaller in size with more upright growing branches than 'Pendulum'. *Japonicum* 'Heronswood Globe' is a dense, bushy, and globed-shaped tree that gained the Royal Horticultural Society's Award of Garden Merit in 2017. It is worth noting that 'Heronswod Globe' is a difficult variety to find due to it having the appearance of a miniature version of the full-sized tree.

Going back to the magnificent katsura (*C. magnificum*), this species is typically smaller in stature with a single main trunk and are often grown at higher elevations like the forested and mountainous areas of Honshu than its *C. japonicum* counterpart. Only smaller in stature, the magnificent katsura has larger leaves, hence the alternative name, large-leaf katsura.



Cercidiphyllum japonicum
'Pendulum'. Photo credit:
Missouri Botanical Garden



Cercidiphyllum japonicum
'Heronswood Globe'. Photo credit:
Blue Bell Nursery

For More Information:

Purcell, L. (2016). Tree selection for the “un-natural” environment. *Purdue Extension*. Retrieved from: <https://www.extension.purdue.edu/extmedia/FNR/FNR-531-W.pdf>

Katsura (*Cercidiphyllum japonicum*)

<https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=j710>

<https://www.mortonarb.org/trees-plants/tree-plant-descriptions/katsura-tree>

<https://www.iucnredlist.org/species/32332/9698762>

<https://www.rhs.org.uk/Plants/124219/i-Cercidiphyllum-japonicum-i-Heronswood-Globe/Details>

<https://www.rhs.org.uk/Plants/94012/i-Cercidiphyllum-japonicum-i-f-i-pendulum-i/Details>

[https://en.wikipedia.org/wiki/Go_\(game\)](https://en.wikipedia.org/wiki/Go_(game))

Magnificent Katsura (*Cercidiphyllum magnificum*)

<https://www.rhs.org.uk/Plants/3416/Cercidiphyllum-magnificum/Details>

Eastern Redbud (*Cercis canadensis*)

<https://www.arborday.org/trees/treeguide/treedetail.cfm?itemID=912>

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