

# Zelkova

*Zelkova serrata* (Thunb.) Makino

## Taxonomic Classification

Domain: *Eukaryotes*

Kingdom: *Plantae*

Phylum: *Tracheophyta*

Class: *Equisetopsida*

Order: *Rosales*

Family: *Ulmaceae*

Genus: *Zelkova*

Species: *serrata*

[1]



## Botanical Description

Trees deciduous, to 85 ft, crown rounded; branches slender. Leaves 2-10 cm long, longer than wide, leaves with 7 or more pairs of parallel veins, the lowest not prominent; margins (edge of leaf blade) sharply serrate. Flowers polygamous (some with only male or female parts, some with both), the male flowers clustered, the female and perfect (with both male and female parts) flowers born singly in leaf axils, usually higher in the tree, flowers bloom on new growth. Fruit a subglobose drupe with thin flesh and a hard-pitted seed; winter buds somewhat spreading. [5]

# Identification Tips

Zelkova is easily confused with *Ulmus* and *Celtis*. The key identifying factors are that *Zelkova* fruit is a drupe not a samara (winged fruit) like *Ulmus*. Also, *Zelkova* has 7 or more pairs of parallel veins and winter buds spreading, in comparison to *Celtis*' 6 or fewer pairs of veins and winter buds appressed.

[5]

## Fun Fact!

*serrata* refers to the serrated (knife-like teeth) edge of the leaf; this helps in remembering the name.



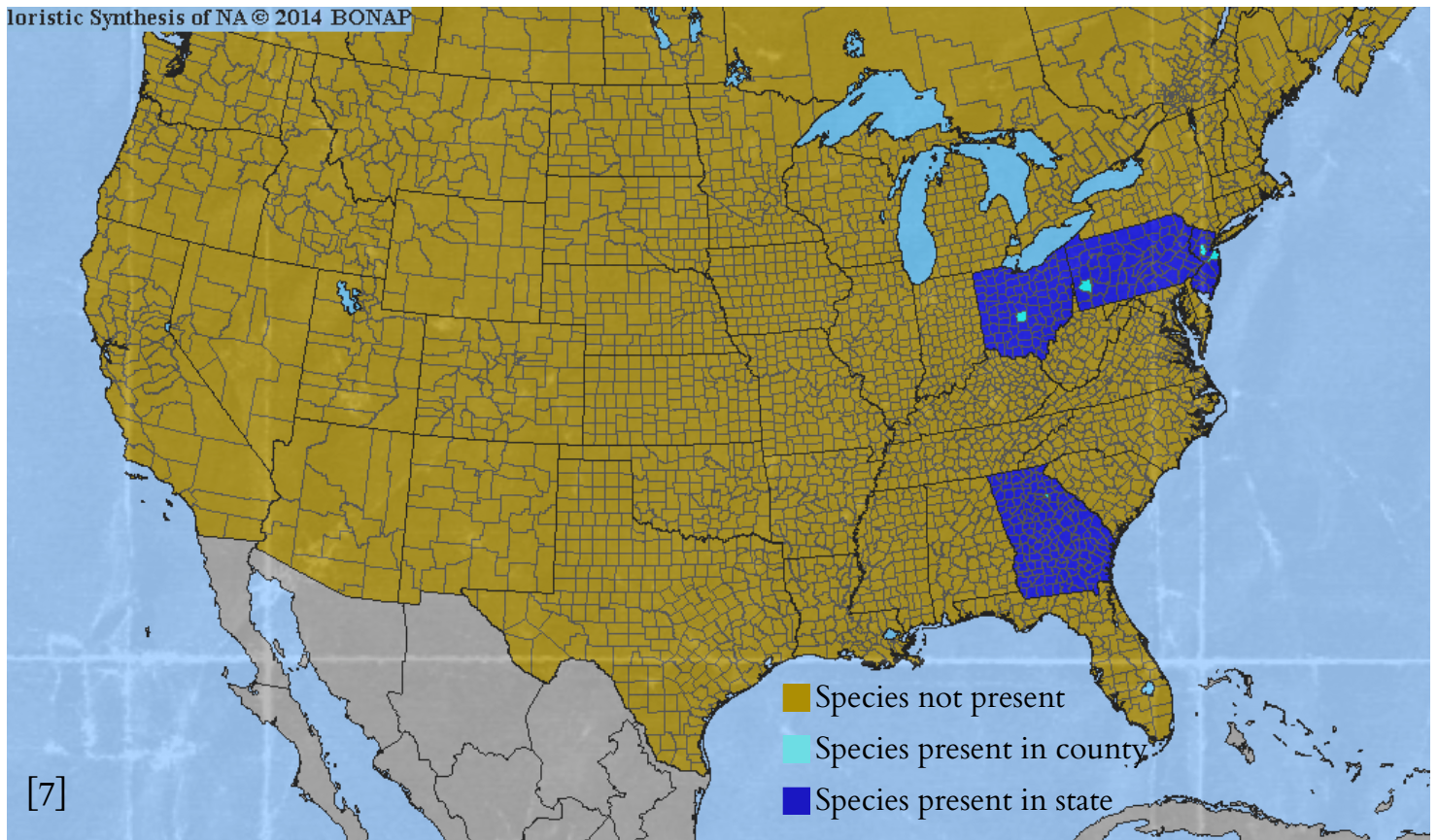
[6] leaves and flowers

## Ethnobotanical and Other Uses

Zelkova is cultivated as a shade or ornamental tree for landscaping in the State of Utah as well as others across the United States. Thus, it is popular for use along parking strips, streets, and parks [5]. In China and Japan, *Zelkova serrata* is traditionally one of the most popular species for use as a bonsai tree. It is also at risk due to logging and wood harvesting of the tree for furniture and construction because the wood is heavy and beautiful red [8].

## Habitat Range





## Conservation Status

Zelkova is not globally rated [1].  
As of 2018, the species is identified as  
near-threatened where native [8].

## Plant Ecology

The species typically grows in steep ravines near  
streams or rivers where native in Japan, China,  
North Korea, and South Korea. Zelkova is exotic  
and cultivated in the United States, not yet  
naturalized in most states.

[8]

## References:

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[8] Kozłowski, G., Bétrisey, S., Song, Y., Fazan, L., & Garfi, G. (2018). *The Red List of Zelkova*. Natural History Museum Fribourg.

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