White Poplar

Populus alba var. alba L.

Taxonomic Classification

Domain: Eukaryotes Kingdom: Plantae

Subkingdom: Tracheobionta

Super Division: *Spermatophyta*

Division: Magnoliophyta Class: Magnoliopsida Sub Class: Dilleniidae

Order: Salicales
Family: Salicaceae
Genus: Populus

Species: Populus alba







Botanical Description

[1]

Perennial tree, usually with one main woody trunk. The trees spread by root sprouts and grow to be about 30 m tall. Trunk up to about 1 m in diameter, bark is gray-green to whitish, smooth on upper parts of the tree, and furrowed on older parts of the trunk. Furrowed parts of the trunk may start to appear black. Twigs white wooly hairy. Leaves deeply palmately 3-5 lobed; leaf blades longer than wide, deltoid-ovate in outline, lobes then toothed, aecriform (maple leaf like) leaves dark green and glabrous (smooth) above, white and wooly hairy below. Flowers appear before or with the leaves, in ament (long cylindrical clusters, unisexual catkin) that hang down. Trees dioecious (having only either male or female flowers on one tree), male flowers gray with a red stigma, female flowers yellow/green. Fruit a capsule, 2-5 mm long, glabrous with 2 or 3 valves. [5]

Identification Tips

The leaf shape might suggest that this plant is related to maple, but it is actually a cottonwood and more closely related to willows (genus *Salix*). The genus *Populus* has several scales covering the bud, whereas the genus *Salix* has only one. White Poplar's most distinctive characteristic is the white wooly hairy stems and underside of leaves, for which it is named, *alba* means white in Latin. [5]



Fun Fact!

The White Poplar flowers are found in long cylindrical, pendulous clusters called aments [6], a type of catkin which is named such because it resembles a cat's tail. The flowers depend on the wind to be pollinated.



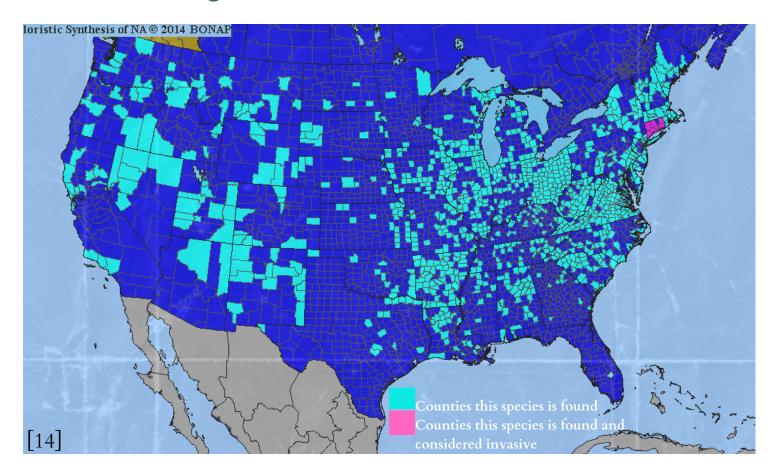




Ethnobotanical and Other Uses

This tree was used by both the Iroquois and the Ojibwa tribes for many purposes. Some would use the inner bark as a cold remedy [10], some pounded the plants and used as a wash for rheumatism [11]. The root or bark would be used as medicine for internal blood diseases [12], and the wood was used to make paper [13]. It is now used as an ornamental tree to beautify landscapes.

Habitat Range



Conservation Status

White poplar is not native and shown to be invasive in some areas of the united states, specifically Connecticut [14].

Plant Ecology

This tree is not native to the U.S., but rather, Eurasia [15]. It has been introduced as an ornamental tree. In North America it occurs near densely populated areas where it has escaped cultivation.

References:

- [1] Moore, G., Goldman, D., Garland, M., Taliga, C., & Hinshaw, J. (2014). Populus alba, white poplar. Retrieved 2023,.
- [2] 152622393049743362. (n.d.). Picture This. photograph. Retrieved September 14, 2023, from https://www.picturethisai.com/wiki/Populus_alba.html.
- [3] Naydenov, D. (2018). Populus_alba_fruits. Wikimedia Commons. photograph. Retrieved 2023, from https://commons.wikimedia.org/wiki/File:Populus_alba_fruits.JPG.
- [4] Balonado, G. (n.d.). White Poplar. photograph.
- [5] Welsh, S. L., Atwood, N. D., Goodrich, S., & Higgins, L. C. (2003b). A Utah flora (Third Edition, Ser. Revised). Monte L. Bean Life Science Museum.
- [6] Harris, J. G., & Harris, M. W. (2009). Plant identification terminology: An illustrated glossary (Second Edition). Spring Lake.

- [7] Redouté., P.-J. (1801). White Poplar (Populus Alba). Raw Pixel. painting. Retrieved 2023, from https://www.rawpixel.com/search/populus%20albapage=1&sort=curated&topic_group=_topics.
- [8] la la means I love you. (2010). Populus alba 01. Wikimedia Commons. photograph. Retrieved 2023, from https://commons.wikimedia.org/wiki/File:Populus_alba_01.jpg.
- [9] Lavin, M. (2010). Populus Alba. flikr. photograph, Bozeman, Montana . Retrieved 2023, from https://www.flickr.com/photos/plant_diversity/5002918098.
- [10] Herrick, J. W. (n.d.). White Poplar, Iroquois- Drug, Cold Remedy, 1977. Retrieved 2023,.
- [11] Raegan, A. B. (n.d.). White Poplar, Ojibwa- Drug, Antirheumatic (External), 1928. Retrieved 2023,.
- [12] Reagan, A. B. (n.d.). White Poplar, Ojibwa- Drug, Blood Medicine, 1928. Retrieved 2023,.
- [13] Reagan, A. B. (n.d.-b). White Poplar, Ojibwa- Other, Paper, 1928. Retrieved 2023,.
- [14] Populus alba county distribution map. 2013 Bonap North American Plant Atlas. taxonmaps. (2014, December 15). http://bonap.net/Napa/TaxonMaps/Genus/County/Populus
- [15] USDA/USFS. (n.d.). Populus alba and hybrids. https://www.fs.usda.gov/database/feis/plants/tree/popspp/all.html#34

Information collated by Abbigale L. Baum under the direction of Dr. Ashley N. Egan in collaboration with UVU's summer 2023 BOT 2050 and fall 2023 BOT 4300 classes and through the UVU Excelerate Program.





