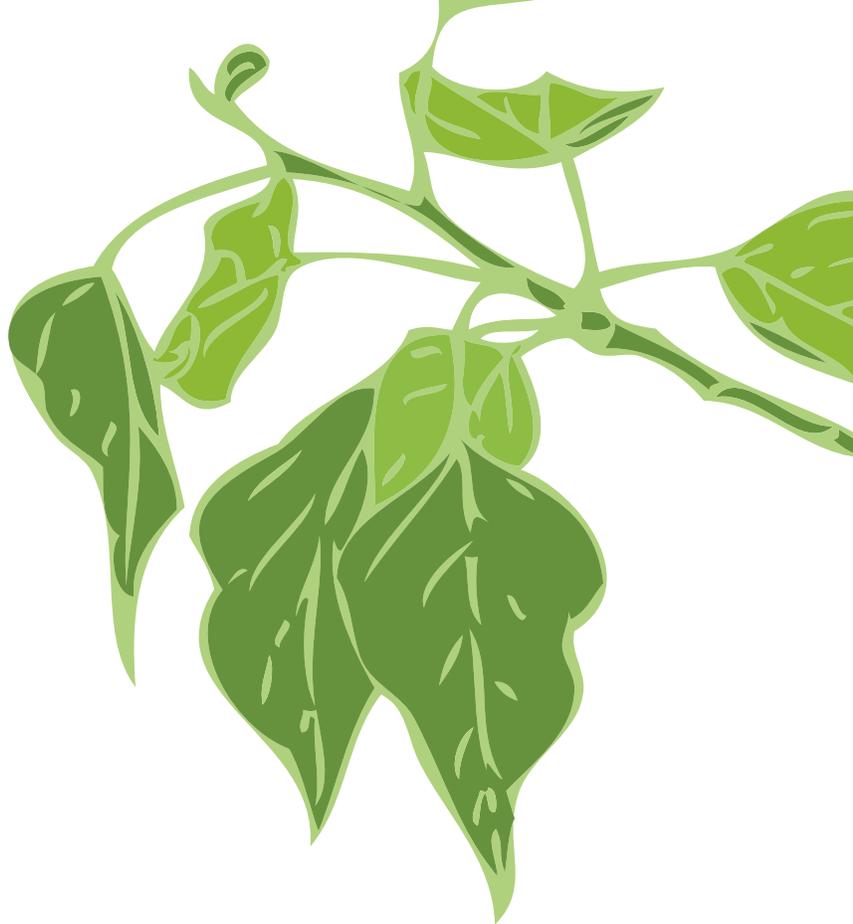


Planting & Caring for Your Poplar



Pre-care for your poplar plug

Keeping the plug moist will make it easier to extract the seedling.

Planting your poplar

In the mild Bay Area climate, autumn is a good planting season for the poplar. If cold snaps in your area prevent

you from planting your poplar seedling immediately, you can hold the seedling within its container for another 4-6 weeks; just keep it well watered and apply fertilizer once every 2 weeks. Transplant to a larger container as needed for holding.

To extract a seedling from the container, firmly pull at the base of the stem. Generally, the seedling should come out of the container easily. Place the root plug 1/4 to 1/2 inch below the ground surface, and firm up potting soil around the seedling. Be careful not to step on the tiny tree!

Water well over the next 2-3-week establishment period. You can add fertilizer (commercial mix) during this period.

Where to plant your poplar

Poplars grow very big, very fast. Their root systems can extend more than 100 feet in search of water. Planting one close to houses or ceramic water pipes may result in damaged foundations and cracked walls and pipes.

Facts about Poplars

Poplar trees can be found around the world and are known for their ability to grow very tall very quickly. Some reports suggest poplars can grow as much as 8 feet in a single year.

On his march across Europe, Napoleon is said to have had his soldiers plant poplars along the way, using the trees on return trips to retrace his route. During their 3-year expedition toward the Pacific Ocean following the Louisiana Purchase, Lewis and Clark made canoes from poplar, and also discovered three new species in Montana.

The poplar's ability to grow very quickly is just one of the reasons it was the first tree to have its genome sequenced by the Department of Energy Joint Genome Institute. The species sequenced was *Populus trichocarpa*, found along the Pacific coast from San Diego to Alaska, and also known as black cottonwood.

The Department of Energy is exploring the use of trees like the poplar and fast-growing perennial grasses such as switchgrass and *Miscanthus* as sustainable sources of biomass for conversion into biofuels.

The poplar is also being studied to find ways to enhance its capabilities for long-term carbon storage. Rising levels of carbon dioxide and other greenhouse gases in the atmosphere are causing global temperature shifts. Trees help remove the carbon dioxide from the atmosphere, storing it in a long-lived and safe form.

The U.S. Department of Energy Joint Genome Institute (DOE JGI), supported by the DOE Office of Science, is a national user facility advancing genomics in support of clean energy generation and environmental characterization and cleanup. A part of Lawrence Berkeley National Laboratory, the DOE JGI is headquartered in Walnut Creek, Calif., and partners with the three DOE Bioenergy Research Centers: JBEI, BESC, and GLBRC.