

Plant Data Sheet

Species:

California Hazelnut, *Corylus cornuta* var. *californica*

(*Corylus cornuta* is a transcontinental native of North America, "var. *californica*" refers to the Pacific Northwest coast variety) (Zimmerman, 1991)



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Range:

Pacific Northwest region from Santa Cruz County California, north to Oregon, Washington, and British Columbia

(Zimmerman, 1991)

Climate, elevation:

Cool temperate regions, low to middle elevation (below 2,000 meters in California, below 800 meters in B.C.)

(Zimmerman, 1991)

Local occurrence:

Sporadically distributed, more often west of Cascades (Pojar and Mackinnon, 1994)

Habitat preferences:

Dry sites or moist sites, if soil is well drained. Full sun to part shade, South and West slopes. Burned or logged areas, and along streams (Zimmerman, 1991)

Plant strategy type/successional stage:

Ruderal, can colonize disturbed areas / seral to late successional, can tolerate mature forest understory (Leigh, 1999)

Associated species:

Quercus garryana woodlands, *Pseudotsuga menziesii* forest (Zimmerman, 1991)

Holodiscus discolor, *Acer circinatum*, *Rosa gymnocarpa* (Franklin and Dyrness, 1988)

May be collected as:

Seed, Salvaged if young and/or small <5' tall, Layered, or Cut to produce offshoots from root crown, (Leigh, 1999)

Semi-hardwood cuttings (Young, 2001)

Collection restrictions or guidelines:

Seed ripens August through September in Washington,(Zimmerman, 1991) it is ripe when sheath turns brown, (Young, 2001) difficult to gather seed before animals get them, has mast years every 2-5 years, late frosts can kill flowers, seed production increases with stem age until about 11 years old (Zimmerman, 1991)

Seed germination:

Clean sheaths off of nut, soak for 24 hours, and provide three months cold stratification in dry perlite (Young, 2001)

Seed life:

Recalcitrant, should be kept moist, and processed immediately after collection, (Young, 2001)

Recommended seed storage conditions:

Recalcitrant, long-term storage not recommended (Young, 2001)

Propagation recommendations:

Most often grown from seed, germination rates: 20%, (Zimmerman, 1991), or 40%-75%, (Young, 2001)

The following protocol for cuttings is from, Young, 2001 working in California:

Semi-Hardwood cuttings are collected between July 1st and November 1st.

Cutting diameter, 1.2 cm Cutting length, 12.5 cm with min. 3 nodes

Cuttings kept moist and cool prior to treatment

Cuttings dipped in a mild bleach solution for 30 seconds

Cuttings treated with Hormex (3000 ppm IBA) rooting powder and stuck 30/flat, 5cm deep

Flats in greenhouse and watered with automatic mist until roots develop.

Cuttings grown for 50 days then transplanted

~50% rooting

Soil or medium requirements:

3:1 Perlite/Vermiculite (Young, 2001)

Installation form:

4"x4" x 10" tube container (Treeband #10) (produced from cuttings)containing standard potting mix of peat moss, fir bark, perlite, and sand.

or 2"x10" tube containers (Deepot 40) (produced from seed)

Transplant Survival averages 60%. (Young, 2001)

Recommended planting density:

2.5 meters

Care requirements after installed:

Water once every 2-3 weeks during first summer following transplanting

Normal rate of growth or spread; lifespan:

~18 years, achieves 5 meter height (Zimmerman, 1991)

Sources cited:

Franklin, Jerry and C.T. Dyrness. Natural Vegetation of Oregon and Washington. Oregon State University Press, Corvallis, OR 452 p.

Leigh, Michael. 1999. Grow your Own Native Landscape A Guide to Identifying, Propagating & Landscaping with Western Washington Native Plants. Native Plant Salvage Project WSU Cooperative Extension-Thurston County Olympia, WA. 116 p.

Pojar, Jim and Andrew MacKinnon. 1994. Plants of the Pacific Northwest Coast Washington, Oregon British Columbia & Alaska. BC Ministry of Forests and Lone Pine Publishing, Vancouver, British Columbia, Canada 527 p.

Young, Betty. 2001. Propagation protocol for vegetative production of container *Corylus cornuta* (A. DC.) Sharp var. *californica* (A. DC.) (Deepot 40 and Treeband #10); Golden Gate National Parks, San Francisco, California. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org>. Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery. [Accessed 6 April 2003]

Zimmerman, Mary Lou. 1991. *Corylus cornuta* var. *californica*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, March). Fire Effects Information System, [Online]. Available: <http://www.fs.fed.us/database/feis/> [accessed April 4, 2003]

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