Plant Data Sheet



Species (common name, Latin name) wedgeleaf ceanothus, buckbrush ceanothus, buckbrush Ceanothus cuneatus

Range

Ceanothus is widely distributed in California, Oregon, and the Baja of Mexico. Wedgeleaf ceanothus is found from the Willamette Valley of west-central Oregon, south to the Rogue Valley and Siskiyou Mountains of southwestern Oregon. Wedgeleaf ceanothus is frequent along the coastal ranges of California, to the Liebre, San Gabriel, San Bernardino, Santa Rosa, and Laguna mountains in southern

California. Wedgeleaf ceanothus is also found in the Sierra Juárez and San Pedro Martir mountains of Baja. Varieties of wedgeleaf ceanothus are found along a similar distribution. Buckbrush is commonly found growing throughout wedgeleaf ceanothus distribution in Oregon, California, and Baja while sedgeleaf buckbrush and Monterey ceanothus are confined to areas south of Oregon only. ²

Climate, elevation

Found in "Mediterranean" climate with a majority of annual precipitation occurring in winter with long summer droughts. It occurs in elevations between 0 and 6000 feet (1800 m). ²

Local occurrence (where, how common)

Growth is restricted to the southern part of Washington.²

Habitat preferences

Typically wedgeleaf ceanothus occurs in areas where annual precipitation ranges from approximately 10 to 35 inches (250-900 mm) and where 80% of the annual total precipitation occurs in the fall, winter, and spring. Annual average precipitation ranges from north to south. ²

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Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)

Wedgeleaf ceanothus stands change rapidly during the first 1 to 4 years postfire. In areas where wedgeleaf ceanothus associates with sprouting shrub species postfire succession can typically be described in 3 stages: (1) During the 1st postfire year native and nonnative vegetation forms the dominant cover, while chaparral shrub seedlings and sprouts emerge. (2) During the 2nd postfire year, high mortality of shrub and subshrub seedlings takes place with decreased native and increased nonnative herbaceous plants. (3) In subsequent years, the remaining shrub seedlings and sprouts become well established while herbaceous vegetation gradually decreases. After 8 to 10 years, a relatively mature chaparral cover with little understory exists. Wedgeleaf ceanothus is an actinorrhizal plant that has the ability to fix atmospheric nitrogen. This gives wedgeleaf ceanothus a competitive advantage over other non-nitrogen fixing shrubs herbs and grasses, especially on nitrogen-deficient soils. Over a given year, wedgeleaf ceanothus nodulates nitrogen at an estimated rate of 54 pounds per acre. ^{1,2}

Associated species

Species that may associate with wedgeleaf ceanothus include chamise (*Adenostoma fasciculatum*), hoaryleaf ceanothus (*Ceanothus crassifolius*), hairy ceanothus (*C. oliganthus*), blueblossom (*C. thyrsiflorus*), Nuttall's scrub oak (*Q. dumosa*), toyon (*Heteromeles arbutifolia*), and sugar sumac (*Rhus ovata*), blue oak (*Q. douglasii*) and California buckeye (*Aesculus californica*), shrubs such as red shank (*Adenostoma sparsifolium*), Nuttall's scrub oak, birchleaf mountain-mahogany (*Cercocarpus betuloides*), laurel sumac (*Malosma laurina*), white and black sage (*Salvia mellifera, S. apiana*), sugar sumac, Our Lord's candle (*Yucca whipplei*), and herbs such as giant wildrye (*Leymus condensatus*), and Eastern Mojave buckwheat (*Eriogonum fasciculatum*). ²

May be collected as: (seed, layered, divisions, etc.) Seed or layered. ²

Collection restrictions or guidelines

The mature seed capsule bursts upon opening, making an audible pop, and seeds are cast up to a distance of 35 feet (10.7 m). However, the majority of seeds fall near the parent shrub. Seed casting date and distance depend on phenology of fruit-ripening, temperature, and humidity. Hotter and drier conditions result in further casting which generally occurs during the hot and dry months of July and August.²

Seed germination (needs dormancy breaking?)

Wedgeleaf ceanothus seeds require relatively high temperatures during burning (158 to 212 °F (70-100 °C) to facilitate germination. Germination rates are high after fire which scarifies wedgeleaf ceanothus seed. Heat from fire melts or cracks the cuticle of buried seeds which is necessary for germination. ²

Seed life (can be stored, short shelf-life, long shelf-life) Long shelf-life. ²

Recommended seed storage conditions

Refrigerated and kept dry in a sealed container. ²

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.) Seed planting is recommended. ¹

Soil or medium requirements (inoculum necessary?)

Wedgeleaf ceanothus occurs in chaparral vegetation types in California and Oregon and is commonly associated with poor, rocky soils. Wedgeleaf ceanothus is more frequently found growing on nonserpentine soils of sandstone origins than on <u>serpentine soils</u>.

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Installation form (form, potential for successful outcomes, cost) Plants from containers are recommended. ¹

Recommended planting density

Information unavailable.

Care requirements after installed (water weekly, water once etc.)

Regular watering should be adequate. 1

Normal rate of growth or spread; lifespan

Very little is known about the average life span of wedgeleaf ceanothus, although it is believed that mortality begins in stands >50 years old. ²

Sources cited

Data compiled by (student name and date) Patrick Keegan, May 19, 2006

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¹Hansen, W. Native Plants of the Northwest. http://www.nwplants.com. May 16, 2006

² USDA Forest Service. *Fire Effects Information System*. <u>http://www.fs.fed.us</u>. May 16, 2006