Redwood

Sequoia sempervirens (D. Don) Endl.

Redwood family (Taxodiaceae)

Post-Cook introduction

Large to very large introduced aromatic evergreen tree with short needlelike leaves, in Hawaii reaching about 110 ft (34 m) in height. Trunk straight, becoming enlarged at base, to 3.5 ft (1 m) in diameter, with narrow irregular crown of slender, slightly drooping branches. Bark rough, very thick, fibrous, corky or spongy, dark brown, deeply furrowed into long narrow ridges, exposing reddish brown layers. Inner bark light brown, fibrous, slightly bitter. Twigs very slender, angled, light green, turning brown, ending in scaly brown buds ½ inch (3 mm) long, mostly shedding with leaves.

Leaves spreading in 2 rows, ½–½ inch (6–13 mm) long flattened and nearly ½ inch (3 mm) wide, stalkless with twisted base onto twig, short-pointed, with sunken midvein, slightly shiny dark green above and with whitish lines beneath, gradually shorter toward both ends of twig. Leaves on leading and cone-bearing twigs slightly spreading around twig, scalelike and shorter, only ¼ inch (6 mm) long, sharp-pointed.

Seed-bearing or female cones drooping at ends of slender twigs, oblong, or egg-shaped, $\frac{3}{4}$ –1 inch (2–2½ cm) long, hard and woody, reddish brown, maturing and opening the first year, remaining attached. Cone scales 14–20, the ends 4-sided with horizontal ridge and raised point in center. Seeds 3–7 exposed at base of each conescale, about ½6 inch (1.5 mm) long, light brown, with narrow wings. Male or pollen cones on same tree, oblong, ½6 inch (8 mm) long, borne singly at end of leafy twig, short-stalked.

The heartwood is reddish, and the sapwood light yellow. The wood is lightweight (sp. gr. 0.36), soft, finetextured, and easily worked. When grown in its natural habitat, it is very durable in the soil and resistant to termites. Wood grown in Hawaii is very fast-grown and lacks resistance to decay and termites. The Hawaii grown wood has been tested by the Forest Products Laboratory and found to be similar to California-grown second growth redwood in most properties (Youngs 1960). Redwood trees in Hawaii are quite limby, thus supplying only low-grade lumber suited for construction. In Hawaii, redwood is traditionally used as clear, all-heart lumber for house siding. The locally grown trees will

not supply this product, nor will they supply wood with the durability for which redwood is noted. Construction lumber and fencing will be the main uses for Hawaiigrown redwood.

Redwood has been planted in many Forest Reserves. Maui has more than 280 acres (113 ha) with about 7 million board feet in the Kula Forest Reserve at 5500 ft (1676 m). The tree may be seen at Kokee State Park on Kauai, Walbou Spring Forest Reserve on Maui, and near Volcano Village on Hawaii. It is also planted at about 5500 ft (1676 m) on the land of Piha in the Hilo Forest Reserve and at 3000 ft (914 m) in the Honaunau Forest Reserve. Except in the Kula Forest Reserve on Maui, where it attains a good form, redwood in Hawaii is very strongly tapered in stem form.

Redwood is planted widely as an ornamental and shade tree in moist tropical regions. Pieces of burls placed in water will sprout and produce house plants for temperate regions.

This species is the world's tallest tree. The tallest, in northwestern California, attains a height of about 368 ft (112 m). California redwood, also including giant sequoia, or Sierra redwood, (*Sequoiadendron giganteum* (Lindl.) Buchholz), is the state tree of California.

Range

Pacific Coast region from extreme southwestern Oregon south to central California.

Other common names

coast redwood, California redwood



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 $\label{eq:sequoia} \begin{array}{l} \textit{Sequoia sempervirens} \; (\text{D. Don}) \; \text{Endl.} \\ \textit{Leafy twig, 1 X; cone (lower right), $\frac{2}{3}$ X.} \end{array}$