

Quercus chrysolepis

[Synonyms : *Quercus chrysolepis* var. *nana*, *Quercus chrysophyllus*, *Quercus crassipocula*, *Quercus fulvescens*, *Quercus wilcoxii*]

CANYON LIVE OAK an evergreen shrub or tree. Native to south-western United States, and north-western Mexico, it has brown acorns.

It is also known as Arizona scrub oak, California live oak, Californian live oak, Canyon oak, *Chêne à cupule dorée* (French), Dwarf canyon live oak, *Encino roble* (Spanish), Goldcup live oak, Goldcup oak, Golden cup oak, Goldenleaf oak, Golden oak, Hickory oak, Iron oak, Live oak, Maul oak, Rock oak, Valparaiso live oak, and White live oak.

The flowers are pollinated by the wind – and this tree tolerates drought. Its wood is shock resistant.

This oak can be confused with huckleberry oak, *Quercus vaccinifolia* but the latter is a far smaller shrub and its acorn cups are thinner.

This tree is attractive to butterflies particularly one called the California sister (*Adelpha bredowii*) with which it is said to have a symbiotic relationship.

Chrysolepis is derived from Greek *chryso-* (gold) and *lepido-* (fish-scale) components with reference to the leaf colour, rendered golden by a covering of scale-like hairs.

One or two North American Indian tribes including the Tubatulabal and the Karok harvested the acorns for food. The Karok Indians buried them for from one to four years (usually in boggy ground), to kill any bugs and worms and to remove any bitterness caused by tannin, before the tribe ate them. Authorities note that the acorns were a staple part of the diet of the Luiseño, Shasta and Kawaiisu Indian tribes. The acorns were dried and stored in granaries by the Wintoon, Kawaiisu, Cahuilla and Luiseño Indian tribes often for a year or more, for future use (especially in Winter). The Pomo, Kawaiisu, Cahuilla and Shasta tribes all ground the acorns for flour which was used to make bread, and with the exception of the Kawaiisu, they and the Luiseño, Diegueño and Shasta Indians made the flour into a kind of porridge. Shasta Indians used the acorns to make soup, and the Cahuilla Indians prepared acorn meat for social and ceremonial feasts.

As with coast live oak (*Quercus agrifolia*) the Cahuilla strung the acorns on a cord that was swung against the teeth to make ‘music’ – and they also wore acorn necklaces. Their children played with the acorns and used them for juggling or as jacks (Kawaiisu children used the acorn cups to make tops) and their hunters baited traps with the acorns to catch small animals. The wood was used by the Kawaiisu for construction, and several tribes also collected it as fuel for heating and cooking. The Cahuilla bartered acorn meal (as a cash crop) for food [particularly fruit pods from screwbean mesquite (*Prosopis pubescens*), pinyon nuts (*Pinus cembroides*), and Parry’s pinyon (*Pinus cembroides* var. *quadrifolia*)] and for special services of a shaman. Kawaiisu Indians used acorn meal to mend cracked pots and the Diegueño tribe mixed the acorns with water containing iron to obtain a black dye for their baskets.

Locally this strong and tough wood was used by early settlers for making wagons, tool handles, ships’ frames, wheels, axles, mine supports, fence posts, furniture and agricultural implements. They also burnt it as fuel. Its hardness and shock resistance is well illustrated by the fact that the redwood (*Sequoia sempervirens*), when made into railway sleepers,

was split with wedges (otherwise known as 'mauls' hence the common name, maul oak) made from this oak. Canyon live oak was also made into charcoal.

Authorities state today that this hardwood is one of the most important in California at the beginning of the 21st Century. Supplies of it are said to be limited however and thus it is considered to be of greater interest to cottage industries than to the commercial sector. It has been used in recent times for veneering and for building interiors, furniture and pallets – and is also in demand as a fuel.

The tree was introduced to Britain in 1877 which was also the first year when it was cultivated. It has proved to be invaluable when planted on steep slopes where erosion control is a problem and its golden Autumn colour has recommended it for ornamental landscaping purposes.

Various kinds of deer browse on the foliage and acorns (as do black bears, hares, beavers, rabbits, squirrels, chipmunks, porcupine, voles and mice). In fact in mountainous regions the number of deer feeding on this foliage is said to be sufficient to attract mountain lions. Sometimes cattle and domestic sheep will also eat the leaves. Woodpeckers, jays, crows, pigeons, turkeys, quails and magpies all the enjoy the acorns. Of course the trees also provide cover, and roosting and nesting sites for a wide variety of wildlife as well – and some domestic animals turn to canyon live oak for shade.