

Comparative Seed Manual: FAGACEAE

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This seed manual consists of photos and relevant information on plant species housed in the Integrative Subsistence Laboratory at the Anthropology Department, University of California, Santa Barbara. The impetus for the creation of this manual was to enable UCSB graduate students to have access to comparative materials when making in-field identifications. Most of the plant species included in the manual come from New World locales with an emphasis on Eastern North America, California, Mexico, Central America, and the South American Andes.

Published references consulted¹:

1998. Moerman, Daniel E. *Native American ethnobotany*. Vol. 879. Portland, OR: Timber press.

2009. Moerman, Daniel E. *Native American medicinal plants: an ethnobotanical dictionary*. OR: Timber Press.

2010. Moerman, Daniel E. *Native American food plants: an ethnobotanical dictionary*. OR: Timber Press.

Species included herein:

Quercus agrifolia

Quercus chrysolepis

Quercus engelmannii

Quercus kelloggii

Quercus moreha

¹ **Disclaimer:** Information on relevant edible and medicinal uses comes from a variety of sources, both published and internet-based; this manual does **NOT** recommend using any plants as food or medicine without first consulting a medical professional.

Quercus agrifolia



Family: Fagaceae

Common Names: Coast live oak, California live oak, Encina

Habitat and Growth Habit: This species is native to California, and it is also found outside California along the coast of western North American from Baja California, Mexico to Mendocino County in California, USA. California live oak occurs in coastal environments, woodlands, forests, valleys, foothills, and woodlands.

Human Uses: This species has been used by humans to attract wildlife, for erosion control, as a Native American food staple, wood for charcoal by European colonists, as a source of shade, and for landscaping and ornamental purposes. The acorns have been used by Native Americans such as Cahuilla, who ground acorns into a fine meal and used the flour for bread making. As well the acorns were dried and stored for years. The cooked acorns were also used to make porridge. Costanoan and Luiseño, Pomo, and Kashaya also have used the acorns as a food source. Luiseño also made porridge from acorns and stored the commodity for later winter use.

Sources Consulted:

Moerman 2010

[http://calscape.org/Quercus-agrifolia-\(Coast-Live-Oak\)](http://calscape.org/Quercus-agrifolia-(Coast-Live-Oak)), accessed January 29, 2020.

http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=6983, accessed January 29, 2020.

<https://www.laspilitas.com/nature-of-california/plants/552--quercus-agrifolia>, accessed January 29, 2020.

https://plants.usda.gov/plantguide/pdf/cs_quag.pdf, accessed January 29, 2020.

<https://plants.usda.gov/core/profile?symbol=quag>, accessed January 29, 2020.

Quercus chrysolepis



Family: Fagaceae

Common Names: Canyon live oak, Maul oak, Iron oak, Hickory oak, Golden-leaf oak, and Golden cup oak, Dwarf canyon live oak

Habitat and Growth Habit: Canyon live oak is native to Oregon, California, Nevada, Arizona, and Mexico. Habitats include canyons, mountains, yellow pine forest, red fir forest, lodge pole forest, foothill woodlands, and chaparral.

Human Uses: This oak has been used for erosion control, as a coffee substitute, attracting wildlife, building wagon wheels, and as a Native American food staple. Cahuilla grind acorns into a fine meal and use the meal for bread making, cook acorns to make porridge, and have also used acorn meat as a delicacy and ceremonial food. Diegueño make porridge by shelling, pounding, leaching, and cooking the acorns into mush or gruel. Karok would use the fruit buried to kill the bugs and worms and as food. Many other Native American groups used this species and its resources for food.

Sources Consulted:

Moerman 2010

<http://www.laspilitas.com/nature-of-california/plants/554--quercus-chrysolepis>, accessed January 29, 2020.

https://plants.usda.gov/plantguide/pdf/pg_quch2.pdf, accessed January 29, 2020.

<https://selectree.calpoly.edu/tree-detail/Quercus-chrysolepis>, accessed January 29, 2020.

http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=6987, accessed January 29, 2020.

<http://calscape.org/Quercus-chrysolepis-0>, accessed January 29, 2020.

<https://www.fs.fed.us/database/feis/plants/tree/quechr/all.html>, accessed January 29, 2020.

Quercus engelmannii



Family: Fagaceae

Common Names: Engelmann's oak, Pasadena oak, Mesa oak, Mesa live oak

Habitat and Growth Habit: This species is native to Southern California and Baja California, Mexico. It is found in savannas, woodlands, dry coastal plains, and chaparral. Mesa live oak is found in San Diego County, Pasadena, Central Orange County, Southern Riverside, and Baja California, south of Tecate.

Human Uses: This tree attracts wildlife and has been food for many different Native American populations. For instance, Diegueño have made the bark into a gum that is chewed like candy. As well, they make a porridge with acorns pounded and cooked into a mush or gruel. As well, Luiseño used this acorns from Engelmann's oak to make porridge and stored the acorns as staple food and for winter use.

Sources Consulted:

Moerman 2010

http://www.calflora.org/cgi-bin/species_query.cgi?where-calreclnum=6995, accessed January 29, 2020.

[http://calscape.org/Quercus-engelmannii-\(Engelmann-Oak\)](http://calscape.org/Quercus-engelmannii-(Engelmann-Oak)) , accessed January 29, 2020.

<http://www.laspilitas.com/nature-of-california/plants/559--quercus-engelmannii>, accessed January 29, 2020.

<https://plants.usda.gov/core/profile?symbol=QUEN>, accessed January 29, 2020.

<https://selectree.calpoly.edu/tree-detail/Quercus-engelmannii>, accessed January 29, 2020.

https://www.wildflower.org/plants/result.php?id_plant=QUEN, accessed January 29, 2020.

Quercus kelloggii



Family: Fagaceae

Common Names: Kellogg oak, California black oak, Black oak

Habitat and Growth Habit: California black oak is native to the western coast of North America. Its habitats include the Sierra Nevada mountain range, coastal environments, mixed evergreen forests, northern oak woodlands, and yellow pine forests.

Human Uses: This species is used widely as food by many different Native American groups. For instance, the Cahuilla use acorns to make flour for bread and cake, porridge, and dried food. Cahuilla also have used the food as a delicacy and cash crop payed to shamans for services. The wood has also been used by Cahuilla for fuel. Other uses include jewelry from acorn use as a fastener for cracks in clay pots. Native American groups that use this species for resources include Diegueno, Karok, Kawaiisu, Luiseno, and more.

Sources Consulted:

<https://www.laspilitas.com/nature-of-california/plants/561--quercus-kelloggii>, accessed January 31, 2020.

<http://www.iucnredlist.org/details/61982990/0>, accessed January 31, 2020.

<http://owic.oregonstate.edu/california-black-oak-quercus-kelloggii>, accessed January 31, 2020.

<https://selectree.calpoly.edu/tree-detail/Quercus-kelloggii>, accessed January 31, 2020.

https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=7000, accessed January 31, 2020.

[http://calscape.org/Quercus-kelloggii-\(\)](http://calscape.org/Quercus-kelloggii-()), accessed January 31, 2020.

<http://naeb.brit.org/uses/32180/>, accessed January 31, 2020.

<http://naeb.brit.org/uses/search/?string=Quercus+kelloggii>, accessed January 31, 2020.

Quercus morehus



Family: Fagaceae

Common Names: Oracle oak, Abram's oak

Habitat and Growth Habit: This species is native to California and Oregon according to the USDA. This is a deciduous oak and evergreen oak.

Human Uses: Human uses of this species are poorly recorded at this time. This species is a F1 hybrid, however, of *Q. kelloggii* and *Q. wislizeni*, suggesting there could be some human uses for this species and its acorns/fruit.

Sources Consulted:

http://oaks.of.the.world.free.fr/quercus_moreha.htm, accessed January 31, 2020

<https://davesgarden.com/guides/pf/go/81458/>, accessed January 31, 2020

<http://eol.org/pages/1151429/overview>, accessed January 31, 2020

http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=11052, accessed January 31, 2020

<https://www.inaturalist.org/taxa/171031-Quercus---moreha>, accessed January 31, 2020

<https://plants.usda.gov/core/profile?symbol=QUMO2>, accessed January 31, 2020