

## Jojoba



In 2006, Yuma County producers grew about 5000 acres of Jojoba mostly in the Eastern most portion of the county.

Jojoba is grown for the liquid wax contained in its seeds. This oil is rare in that it is similar in structure to whale oil than to traditional vegetable oils.

Jojoba oil is easily refined to be odorless, colorless and is very stable.

Roasted Jojoba nuts taste and smell like roasted coffee beans.

Jojoba is a perennial woody shrub grown primarily in the desert regions of the southwestern United States and northwestern Mexico.

Native Americans have long used jojoba oil to help heal sores and wounds. Today, jojoba oil is still most commonly used for cosmetic purposes, particularly for the maintenance of healthy skin.

Jojoba oil can prevent the skin from becoming too oily. Because the structure of jojoba oil so closely resembles natural body oils, it can actually trick the skin into producing less natural oil, which, unlike jojoba, can clog pores.

Jojoba is commonly added to soaps, shampoos, and cosmetics—jojoba oil became very important to the cosmetic industry in the 1970s, when whaling was banned and sperm whale oil was no longer available.

Today thousands of tons of jojoba oil are produced each year in the United States alone, and the majority of it is sold at a high price for cosmetic use. However, researchers are beginning to look for other uses for jojoba. Jojoba oil is very stable, and has demonstrated an ability to withstand both high pressure and temperature.

Jojoba has also shown some promise as an alternative fuel source, and may actually be superior in many ways to traditional diesel fuel. In fact, researchers at the United Arab Emirates University reported that fuel derived from jojoba oil actually gives off fewer emissions and causes less engine corrosion than petroleum-based diesel fuel.

The jojoba oil obtained from the nuts was used in many ways by different Indian tribes. The Apache Indians used the oil to treat pain while Papago Indians used it to cure stomach disorders. Jojoba oil played an important role in skin and hair care. Jojoba nuts were used raw or roasted as ingredients for various dishes or ground to make beverages.

Through its special wax-like structure jojoba oil cannot breakdown and therefore has considerably less tendency to become rancid than other oils. It can withstand temperatures of up to 570° F.

Jojoba oil is an excellent skin care oil which protects the skin from drying out by covering it with a breathable, non-sticky, non-greasy film which also provides natural factor 4 sun protection.

Transformed into hard wax, jojoba oil is used as a base for creams and for soft, white waxes used to make polishes, e.g. for furniture, floors and cars.

A new and promising application which Arabic scientists are currently working on is use of jojoba oil as a substitute for diesel fuel. Because of its lower carbon content the non-toxic and sulphur-free jojoba oil releases less carbon monoxide and carbon dioxide on combustion than conventional diesel fuel. And it does not produce any dangerous sulphur compounds or soot.

Jojoba is a real marvel in dealing with extremes. The evergreen shrub which can reach a height of up to 9 feet and grows in desert regions with night time temperatures down to 32° F and day-time temperatures of up to 120° F. It can only survive these conditions with the help of its tap roots which grow to a depth of up to 12 feet and draw water from the deepest layers of the soil and through its leaves which are specially adapted to cope with the dryness.

The woody shrub has long narrow leaves with a leathery surface and hairy covering which help prevent water loss. The plant is dioecious. That means there are male plants that produce pollen and female plants that produce inconspicuous flowers which develop into the brown, acorn-shaped jojoba nuts after wind-pollination. In spite of their extreme habitat jojoba bushes can become as old as 200 years.

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