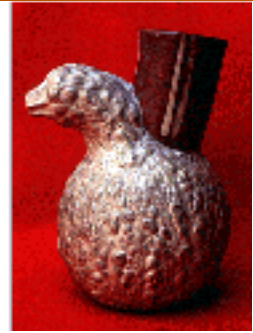




## Ethnobotanical Leaflets

A Publication of the Southern Illinois University Herbarium



# The Extraordinary Olive

Holly Sebby

The several uses of the olive tree, *Olea europaea* L., have long been recognized and celebrated by human civilization. Olive trees have been cultivated since prehistoric times in Asia Minor, and introduced with human migration and trade throughout the Mediterranean and Europe, into Africa, and eventually into New Zealand and North America. Thomas (1995) lists the beginning of olive cultivation as approximately 3000 B.C. Olives appear in one of the first cookbooks ever discovered. As long ago as the 17th century B.C., the olive was considered sacred. In Greek mythology, Athena is said to have placed an olive tree on the Acropolis in order to win over the denizens of Attica, a favor for which the city became her namesake, Athens (Anonymous 1997). The champion at the Olympic Games was crowned with its leaves. "Offering an olive branch" is synonymous with peaceful intentions. The oil was burned in the lamps of sacred temples, as well as being the "eternal flame" of the Olympic games.

There are many references to the olive in the Bible. One of the most significant is in the tale of Noah and the Flood. The dove, sent out to search for a sign of land and life, returned with none other than an olive branch. Moses proclaimed that all men who worked to cultivate olives were exempt from military service (Grieve 1995). The olive is often referred to as a symbol of goodness, purity, and life. The miracle of Hanukkah was the olive oil which burned for eight nights when there was only enough to last for one day (Prero 1996). It is clear that the olive was an important part of life in the Mediterranean, as is the world over today.

## Description

Olive trees are graceful in appearance, with elegant lanceolate silvery evergreen leaves borne on thin branches with pale gray bark. They are 20 to 40 feet tall at maturity, and begin bearing fruit between four and eight years of age (Thomas 1995). Olive trees can attain quite a long life span. "Plato's olive tree is still alive, though no longer productive", and many are estimated to be over 2,000 years old (Neff and ResSeguie 1995). The small flowers are fragrant and creamy white, borne on an inflorescence of 15-30. These flowers may be perfect, but are more often staminate (Thomas 1995). Both cross-pollination and self-pollination occur. Olive trees are wind pollinated, but propagation is usually done vegetatively

from rootstock, since seed propagation is time-consuming and often nonproductive (Tous and Ferguson 1996).

The fruit of the olive tree is a small drupe with high oil content (Thomas 1995). The trees bear fruit alternately. The common forms of olives seen in an American market are either green or black, but actually these types could be harvested from the same tree. The olive fruit begins white, then changes color gradually as it ripens, moving through green, then reddish, and finally to black with ripeness. There is an old Arab riddle that says, "Our servant is green. Her children are born white and then grow black. Who is she? She is an olive tree" (Anonymous 1997). Olives of any color are very bitter and tough straight from the tree, due to high oleuropein content (Grieve 1995), and thus an involved curative process must be preformed before they are edible.

## Uses

There is good reason for the olive's elevated station in society. It is a source of lumber, food, fuel, and medicine as well as beauty. "The beautifully-veined wood not only takes a polish, but is faintly fragrant, and is much valued for small-cabinet work" (Grieve 1995). The roots and branches are often burned as firewood, and the leaves are used as winter fodder for livestock (Anonymous 1997). The fruits are highly prized, and an olive gourmet could tell you the virtues of a Picholine olive versus a Kalamata or a Nicoise. There are many different varieties, differing in size, acidity, and color, and the ripeness and curative method used also greatly affect the end product. Curing with water, brine, or lye takes weeks to transform these hard, tart fruits into a delicacy.

Olive oil is commercially the most versatile part of *Olea*. 90% of Mediterranean olive trees are grown for oil (Tous and Ferguson 1996). It is still used as lamp oil in many regions. It has long been used as medicine. When Adam complained of pain, God is said to have provided the olive tree (Anonymous 1997). Olive oil has powerful laxative properties and is also attributed with aiding in "the removal of gall stones, combating liver ailments, and reducing the chance of ulcers" (Neff and ResSeguie 1995). Olive oil, rubbed on the skin, can help with dryness. It is even used as a hair product and as massage oil.

By far, the most celebrated use of olive oil is culinary. The ripe fruits are pressed in order to extract the oil. It takes approximately one ton of olives to produce 50 gallons of oil (Anonymous 1997). In the *De re Coquinaria*, one of the oldest known cookbooks (approximately 2000 years in age), the Roman cook Apicius described a method for making Spanish oil pass as a higher quality Liburnian oil (Thomas 1995). Today, the origin, processes used, and the acidity of the product are highly regulated in most olive-producing countries. Spain established the D.O.C. (Denominaciones de Origen) system for labeling oil with the region of the groves from which it came, France followed suit, and as of 1995 the European Union recognizes the D.O.C. system (Grieve 1995). High quality olive oil has low levels of acidity, and it is by this that they are commercially categorized. Extra virgin oil is the least acidic, followed by virgin, then refined, then pure. Pomace, or "residue" oil is the lowest grade fit for human consumption (Grieve 1995). Olive oils are enjoyed on salads, pasta, and on vegetables, as well as in cooking.

## Habitat

The birthplace of the olive, the Mediterranean, is still the center of olive production, where 95% of the world's olives are produced today (Tous and Ferguson 1996). Though the olive tree is fairly adaptable, ideal conditions for fruit production include "mild winters and long, hot, dry summers...with temperatures ranging between 35- 65 degrees F (USDA 1995). Winter chilling is required in order for these subtropical trees to flower and bear fruit. Olive trees are fairly drought-resistant and can grow in poor, rocky, alkaline, or saline soils, but the fruit is usually of poor quality in these harsh conditions (Tous and Ferguson 1996). They are not flood tolerant, as their root systems are fairly shallow. The "mission olive" of California derives its name from the Franciscan missionaries who originally planted them near San Diego around 1759 (Anonymous 1997). Olive production has also recently spread to New Zealand and Australia, but these continue to be incidental yields in comparison to the Mediterranean region.

## References

Anonymous. 1997. Olives.

Grieve, M. 1995. Botanical.com; A Modern Herbal. Olive. Electric Newt.

Neff, R. and D. ResSeguie. 1995. Oil of Olives, An Ancient Wonder. Sundance Natural Foods.

Prero, Y. 1996. Chanukah and Olive Oil: Lessons in Devotion. YomTov, vol.II#22.

Thomas, J. Dec, 1995. Olive Fact Sheet.

Tous, J. and L. Ferguson. 1996. Mediterranean Fruits. From J. Janick (ed.) Progress in New Crops. ASHS Press, Arlington, VA. p.416-430.

U.S.D.A. 1995. An Economic Assessment of Olives. (Executive Summary).

[Return to Home Page](#)

---

*SIUC / College of Science / Ethnobotanical Leaflets /*

URL: <http://www.siu.edu/~ebl/>

Last updated: 06-May-2000 / du