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Useful Fruits of Avocado Relatives

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The avocado fruit of the botanical species *Persea americana* Mill, originated in southern Mexico and Central America. It has become widespread throughout the subtropical and tropical regions because of the attractive qualities of its large fleshy fruit. While the major use of the fruit is as a fresh component of salads, several by-products such as avocado cooking oil, guacamole, avocado wine, and some dried animal feeds have been developed. Investigations on the possible utilization of botanical relatives of the avocado for breeding materials and as rootstock sources have disclosed a wide range of plant materials which like the avocado have useful and interesting fruits and plants. The present report is concerned with some of the botanical relatives of avocado which produce useful, through usually very much smaller fruits.

The botanical family Lauraceae, the laurel family, is of ancient origin, as it relates to the Magnolia types of plants which developed in the early periods of life on this earth. Presently, the surviving members of the family consist of warm and tropical species found primarily in southeast Asia, Brazil, Central America, and Mexico, though not confined to these major areas. The family Lauraceae contains approximately 2,200 species of aromatic evergreen shrubs and trees. One unusual member of the group is the dodder-laurel or woe-vine, *Cassytha filiformis* L*.,* which is a semi-parasitic climber, with no leaves but with a small fruit, a berry, comparable to the avocado. The entire plant family is characterized by the presence of ethereal oils in the leaves and fruits. These oils together with other flavoring ingredients provide distinctive flavors which make the fruit useful as a fresh product or as a culinary ingredient in various ethnic foods.

The large fleshy fruit of avocado *(P. americana* Mill.) has been accepted in many areas as a fruit of high quality for salad or dessert. Another closely related species of *Persea: P. schiedeana,* the coyo, also bears large fruits up to 10-12 ounces, attractive as a fresh product. Most of the other species of *Persea* have small fruits which are generally not utilized as is the fruit of avocado.

There are several botanical relatives of avocado which produce small fruits which are generally ignored by the Western world as a food or condiment source, but which may be of interest to those who seek the unusual or use exotic materials in the culinary arts. The Malaysian area produces a number of Lauraceae, many of which are too frost tender for general planting in California; but a few are found occasionally in collections and in warm, protected microclimatic niches.

The anay, *Beilschmedia anay* Kosterm, of Central America produces a fruit with yellow-green oily flesh. This fruit is eaten out of hand. The pyriform fruit is 3 to 6 inches long

with a thin, glossy, purple black skin.

The swamp bay or red bay, *Persea borbonia* L., is a small tree or bush native to southeastern United States. The wood is hard and has been used for furniture. The fragrant leaves have been utilized to flavor soups, stews, and meat dishes. The dried leaf is sometimes made into a tea.

The camphor used in medicinal preparations is derived from extracts of twigs and wood of *Cinnamomum camphora* L. This tree, native to China and Japan, is widely planted in subtropical areas and sometimes becomes a feral pest as the birds spread the seed. A closely related *C. cassia* Blume, a native of East Asia, produces a flavoring from its bark and from the immature fruits (Cassia Buds) which are used as a spice. The dried fruit is used as a substitute for cacao bean. Another species, *C. loureirii* Nees, called the Saigon cinnamon, is cultivated for the bark which is used as a spice. The unripe fruits are dried and sold as Cassia Buds. Another species of *Cinnamomum* provides a small fruit which is eaten by children in Malacca. Such fruits are dried and ground to flavor catsup and as condiments for other foods. *Cinnamomum zeylanicum* contains 33 percent fat which is expressed and used for church candles. The cinnamon bark of commerce is produced by this latter species.

Cryptocarya wyleii, the red-haired laurel, is a coastal bush of South Africa which has small round fruit 1.3 cm in diameter with a rosy-apricot color and a pleasant flavor. *Cryptocarya cunninghamii,* a native of northern Australia, has a small black fruit which is said to be poisonous and should be handled with great care.

A native of California, *Umbellularia californica,* produces small fruits about olive size which can be parched and eaten or ground into flour for bread.

The genus *Litsea* is found in many tropical areas of Central America, South America, Mexico, and in the oriental areas of Malaysia, Indonesia as well as Australia and New Zealand. *Litsea thunbergii* of Malaysia bears a small fruit which is made into steamed dumplings called sajimochi. Another species, *L. glutinis* from Malaysia, has a small fruit with a sweet pulp highly suggestive of avocado in flavor. *Litsea graciae* of Indonesia and the Philippines has a fruit with a pink edible skin beneath which is a creamy white flesh. The fruit upon reaching maturity is rolled and pressed briefly as one might do with a lemon.

The mountain pepper of tropical Asia, *Litsea cubeba,* produces a highly scented fruit which is sometimes substituted for cubeb pepper in flavoring of goat's meat or fish.

The common Grecian laurel, *Lauras nobilis* L., widely planted as an ornamental in many countries, bears small dark colored berries which can be distilled as a liqueur (florivanti), a practice which is followed in some Mediterranean countries.

Lindera benzoin, the spicebush, is a very aromatic native shrub of eastern United States which bears smallish fruits that are sometimes eaten fresh, but are generally dried for use as a condiment for meats and stews.

The only climber in the Lauraceae is the woe-vine, *Cassytha filiformis,* the most common species found in many tropical areas. About a dozen other species, many in the coastal areas of tropical Australia, bear small round fruits, some up to one half inch in diameter. These small berries have a comparatively large seed but are similar to the

avocado fruit but with a much thinner edible layer. The fruits are eaten on occasion.

Many of the species described above and a large number of other species within the botanical family Lauraceae are of considerable value among ethnic groups, particularly in the tropical environments where they provide timbers, leaf extracts, bark extracts, and many medicinal products from the roots, fruits, seed, and flower buds.

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The avocado fruit of the botanical species. Persea americana. Mill, originated in southern Mexico and Central America. It has become widespread throughout the subtropical and tropical regions because of the attractive qualities of its large fleshy fruit. While the major use of the fruit is as a fresh component of salads, several by-products such as avocado cooking oil, guacamole, avocado wine, and some dried animal feeds have been developed.Â The present report is concerned with some of the botanical relatives of avocado which produce useful, through usually very much smaller fruits. The botanical family Lauraceae, the laurel family, is of ancient origin, as it relates to the Magnolia types of plants which developed in the early periods of life on this earth. Avocados are a stone fruit with a creamy texture that grow in warm climates. Their potential health benefits include improving digestion, decreasing risk of depression, and protection against cancer. Also known as an alligator pear or butter fruit, the versatile avocado is the only fruit that provides a substantial amount of healthy monounsaturated fatty acids (MUFA). Avocados are a naturally nutrient-dense food and contain nearly 20 vitamins and minerals. This MNT Knowledge Center feature is part of a collection of articles on the health benefits of popular foods. In the article, we take an i Avocado - Persea americana. The name 'Avocado' originates from the Aztec name ahuacacuauhitl meaning testicle tree! The avocado is a dense, evergreen tree, shedding many leaves in early spring.Â Avocado flowers are crosspollinated which means that developing independent genetic lines is difficult. In fact, crosspollination is promoted in the flowers by the stigma of a flower being receptive to pollen prior to pollen being released from that same flower. Avocado trees produce thousands of flowers and only about one in 5000 sets fruit. Considering it originated from South American forests, the Avocado is remarkable in its ability to thrive under a broad range of environmental conditions. It needs water and no frost and prefers unleached, nonacid soils, sun, and dry air. Avocados have more soluble fibre than other fruit and contain a number of useful minerals such as iron, copper and potassium and are a good source of the B vitamin, folate. 2. Source of heart-healthy monounsaturated fats. 100g of avocado contains about 19g of fat, of which 12g are monounsaturated fats (only 4g of saturated fat). The guidance around the types of fat we should be consuming for a healthy diet is ever changing.Â There is no doubt that the calorie content of avocados is greater than other fruits and vegetables. One small study has shown however that the fat content of avocados can lead to feelings of satiety which can help with appetite regulation. 5. Vitamin E helps keep eyes healthy.