

# Coffee Plant

The coffee plant makes a great indoor, outdoor shade, or office plant. Water when dry or the plant will let you know when it droops. Do not let it sit in water so tip over the pot if you over water the plant. Perform the finger test to check for dryness. When the plant is dry about an inch down, water thoroughly. The plant will stay pot bound about two years at which time you will transplant and enjoy a beautiful ornamental plant. See below.

Coffea

From Wikipedia, the free encyclopedia

This article is about the biology of coffee. For the beverage, see Coffee.

Coffea

Coffea arabica trees in Brazil

Scientific classification

Kingdom: Plantae

(unranked): Angiosperms

(unranked): Eudicots

(unranked): Asterids

Order: Gentianales

Family: Rubiaceae

Subfamily: Ixoroideae

Tribe: Coffeae[1]

Genus: Coffea

L.

Type species

*Coffea arabica*

L.[2]

Species

*Coffea ambongensis*

*Coffea anthonyi*

*Coffea arabica* - Arabica Coffee

*Coffea benghalensis* - Bengal coffee

*Coffea boinensis*

*Coffea bonnieri*

*Coffea canephora* - Robusta coffee

*Coffea charrieriana* - Cameroonian coffee - caffeine free

*Coffea congensis* - Congo coffee

*Coffea dewevrei* - Excelsa coffee

*Coffea excelsa* - Liberian coffee

*Coffea gallienii*

*Coffea liberica* - Liberian coffee

*Coffea magnistipula*

*Coffea mogeti*

*Coffea stenophylla* - Sierra Leonian coffee



*Coffea canephora* green beans on a tree in Goa, India.

*Coffea* is a large genus (containing more than 90 species)<sup>[3]</sup> of flowering plants in the madder family, Rubiaceae. They are shrubs or small trees, native to subtropical Africa and southern Asia. Seeds of several species are the source of the popular beverage coffee. After their outer hull is removed, the seeds are commonly called "beans". Coffee beans are widely cultivated in tropical and sub-tropical countries on plantations, for both local consumption and export to probably every other country in the world. Coffee ranks as one of the world's most valuable and widely traded commodity crops and is an important export of a number of countries.

Contents [hide]

1 Botany

1.1 Shade-grown coffee

2 Chemistry of green coffee beans

2.1 Non-volatile alkaloids

2.2 Proteins and amino acids

2.3 Carbohydrates

2.4 Lipids

2.5 Non-volatile chlorogenic acids

2.6 Volatile compounds

2.7 Health properties

3 New coffee species

4 Other uses

5 See also

6 References

7 External links

[edit]Botany

*Coffea canephora*

When grown in the tropics, coffee is a vigorous bush or small tree which usually grow to a height of 3–3.5 m (10–12 feet). Most commonly cultivated coffee species grow best at high elevations. Although they are hardy and capable of withstanding severe pruning, they are nevertheless not very tolerant of sub-freezing temperatures, and so cannot be grown in temperate climate zones. To produce a maximum yield of coffee berries/cherries (800–1400 kg per hectare), the plants need substantial amounts of water and fertilizer. Since they grow best in alkaline soils, calcium carbonate and other lime minerals are sometimes used to reduce acidity in the soil, which can occur due to run off of minerals from the soil in mountainous areas.<sup>[4]</sup> The caffeine in coffee "beans" is a natural defense: a toxic substance which repels many creatures that would otherwise eat the seeds - as with the nicotine in tobacco leaves.

Coffea berries, Bali

There are several species of Coffee that may be grown for the beans, but *Coffea arabica* is considered by many to have the best overall flavor and quality.<sup>[citation needed]</sup> The other species (especially *Coffea canephora* (var. *robusta*)) are usually grown on land unsuitable for *Coffea arabica*. The tree produces red or purple fruits (drupes), which contain two seeds (the "coffee beans", which — despite their name — are not true beans, which are the seeds of the legume family). In about 5-10% of any crop of coffee cherries, the cherry will contain only a single bean, rather than the two usually found. This is called a 'peaberry', which is smaller and rounder than a normal coffee bean. It is often removed from the yield and either sold separately, (as in New Guinea Peaberry) or discarded.

The tree of *Coffea arabica* will grow fruits after 3 – 5 years and will produce for about 50 – 60 years (although up to 100 years is possible). The blossom of the coffee tree is similar to jasmine in color and smell. The fruit takes about nine months to ripen. Worldwide, an estimated 15 billion coffee trees are grown on 100,000 km<sup>2</sup> (39,000 sq mi) of land.

Coffee is used as a food plant by the larvae of some Lepidoptera (butterfly and moth) species including *napoleon jacin*, *Dalceria abrasa*, Turnip Moth and some members of the genus *Endoclyta*, including *E. damor* and *E. malabaricus*.

There are several pests that affect coffee production, including the coffee borer beetle (*Hypothenemus hampei*) and the coffee leafminer *Leucoptera coffeana*.

[edit]Shade-grown coffee

Main article: Shade-grown coffee

Coffee farmer in Ethiopia.

In its natural environment, coffee most often grows in the shade (Paypa). However, most cultivated coffee is produced on full-sun, monocropping plantations, as are most commercial crops, in order to maximize production per unit of land. This practice is, however, detrimental to the natural environment since the natural habitats which existed prior to the establishment of the plantations are destroyed, and all non-*Coffea* flora and fauna are suppressed - often with chemical pesticides and herbicides. Shade-grown coffee is favored by conservationists, since it permits a much more natural, complex ecosystem to survive on the land occupied by the plantation. Also, it naturally mulches the soil it grows in, lives twice as long as sun-grown varieties, and depletes less of the soil's resources - hence less fertilizer is needed. In addition, shade-grown coffee is considered by some to be of higher quality than sun-grown varieties, as the cherries produced by the *Coffea* plants in the shade are not as large as commercial varieties;