

[http://en.wikipedia.org/wiki/Cinnamomum\\_aromaticum](http://en.wikipedia.org/wiki/Cinnamomum_aromaticum)

*Cinnamomum aromaticum*, called cassia or Chinese cinnamon, is an evergreen tree native to southern China, Bangladesh, Uganda, India, and Vietnam. Like its close relative *Cinnamomum verum*, also known as "Ceylon cinnamon",<sup>[1]</sup> it is used primarily for its aromatic bark, which is used as a spice. In the United States of America, cassia is often sold under the culinary name of "cinnamon". The buds are also used as a spice, especially in India, and were once used by the ancient Romans.

The tree grows to 10–15 m tall, with greyish bark and hard elongated leaves that are 10–15 cm long and have a decidedly reddish colour when young.

*Cinnamomum aromaticum* is a close relative to Ceylon cinnamon (*C. verum*), Saigon cinnamon (*C. loureiroi*, also known as "Vietnamese cinnamon"), camphor laurel (*C. camphora*), malabathrum (*C. tamala*), and Indonesian cinnamon (*C. burmannii*). As with these species, the dried bark of cassia is used as a spice. Cassia cinnamon's flavour is less delicate than that of Ceylon cinnamon; for this reason, the less expensive cassia is sometimes called "bastard cinnamon".<sup>[2]</sup>

Whole branches and small trees are harvested for cassia bark, unlike the small shoots used in the production of cinnamon; this gives cassia bark a much thicker and rougher texture than that of true cinnamon.<sup>[citation needed]</sup>

Most of the spice sold as cinnamon in the United States and Canada (where Ceylon cinnamon is still generally unknown) is actually cassia. In some cases, cassia is labeled "Chinese cinnamon" to distinguish it from the more expensive Ceylon cinnamon (*C. verum*), which is the preferred form of the spice used in Mexico, Europe and Oceania.<sup>[3]</sup> "Indonesian cinnamon", also referred to as *C. burmannii*, is also commonly sold in the United States where it is labeled only as cinnamon.

*Cinnamomum aromaticum* is produced in both China and Vietnam. Until the 1960s, Vietnam was the world's most important producer of Saigon cinnamon (*C. loureiroi*), a species which has a higher oil content than cassia, and consequently has a stronger flavor. Saigon cinnamon is so closely related to cassia that it was often marketed as cassia (or, in North America, "cinnamon"). Of the three forms of cassia, it is the form which commands the highest price. Because of the disruption caused by the Vietnam War, however, production of *C. burmannii*, in the highlands of the Indonesia on island of Sumatra, was increased to meet demand, and Indonesia remains one of the main exporters of cassia today. Indonesian cassia has the lowest oil content of the three types of cassia and, consequently, commands the lowest price. Saigon cinnamon, only having become available again in the United States since the early 21st century, has an intense flavour and aroma and a higher percentage of essential oils than Indonesian cassia. Cassia has a stronger and sweeter flavor, similar to Saigon cinnamon, although the oil content is lower. In China (where it is produced primarily in the southern provinces of Guangxi, Guangdong, and Yunnan) cassia is known as tung hing.<sup>[4]</sup>

Cassia bark (both powdered and in whole, or “stick” form) is used as a flavouring agent for confectionery, desserts, pastries, and meat; it is specified in many curry recipes, where Ceylon cinnamon is less suitable. Cassia is sometimes added to Ceylon cinnamon, but is a much thicker, coarser product. Cassia is sold as pieces of bark (as pictured below) or as neat quills or sticks. Cassia sticks can be distinguished from Ceylon cinnamon sticks in the following manner: cinnamon sticks have many thin layers and can easily be made into powder using a coffee or spice grinder, whereas cassia sticks are extremely hard, are usually made up of one thick layer, and can break an electric spice or coffee grinder if one attempts to grind them without first breaking them into very small pieces.[citation needed]

**In India**, where Cinnamon is cultivated on the hills of Kerala, it is called “karuvapatta” or “Elavanga Tholi”(Malayalam) or “dalchini”(Hindi).

Portuguese traders landed in Ceylon at the beginning of the sixteenth century and restructured the traditional production and management of cinnamon in Ceylon. The Portuguese established a fort on the island in 1518 and protected their own monopoly for over a hundred years. The Dutch East India Company continued to overhaul the methods of harvesting in the wild and eventually began to cultivate its own trees. The British took control of the island from the Dutch in 1796. The cultivation of the cinnamon tree spread to other areas, the more common cassia bark became more acceptable to consumers.

Cinnamon is harvested by growing the tree for two years then coppicing it. The next year, about a dozen shoots will form from the roots.

The branches harvested this way are processed by scraping off the outer bark, then beating the branch evenly with a hammer to loosen the inner bark. The inner bark is then prised out in long rolls. Only the thin (0.5 mm (0.020 in)) inner bark is used; the outer, woody portion is discarded, leaving metre-long cinnamon strips that curl into rolls (“quills”) on drying. Once dry, the bark is cut into 5–10 cm (2.0–3.9 in) lengths for sale. The bark must be processed immediately after harvesting while still wet. Once processed, the bark will dry completely in four to six hours.

The flavour is due to an aromatic essential oil that makes up 0.5% to 1% of its composition. The pungent taste and scent come from cinnamic aldehyde or cinnamaldehyde (about 60 % of the essential oil from the bark) and, by reaction with oxygen as it ages, it darkens in colour and forms resinous compounds.

Cinnamon bark is widely used as a spice. It is principally employed in cookery as a condiment and flavouring material. It is often mixed with rosewater or other spices to make a cinnamon-based curry powder for stews or just sprinkled on sweet treats. It is also used in

sambar powder or BisiBelebath powder in Karnataka, which gives it a rich aroma and tastes unique.

Cassia buds, although rare, are also occasionally used as a spice. They resemble cloves in appearance and have a mild, flowery cinnamon flavor. Cassia buds are primarily used in old-fashioned pickling recipes, marinades, and teas.

Cassia is used in traditional Chinese medicine, where it is considered one of the 50 fundamental herbs. In 2006, a study reported no statistically significant additional benefit when cinnamon cassia powder was given to type 2 diabetes patients who were already being treated with metformin.[8] A systematic review of research indicates that cinnamon may reduce fasting blood sugar, but does not have an effect on hemoglobin A1C, a biological marker of long-term diabetes.[9]

Chemist Richard Anderson says that his research has shown that most, if not all, of cinnamon's antidiabetic effect is in its water-soluble fraction, not the oil (the ground cinnamon spice itself should be ingested for benefit, not the oil or a water extraction). In fact, some cinnamon oil-entrained compounds could prove toxic in high concentrations. Cassia's effects on enhancing insulin sensitivity appear to be mediated by type-A polymeric polyphenols.[10][11] Despite these findings, cassia should not be used in place of anti-diabetic drugs, unless blood glucose levels are closely monitored, and its use is combined with a strictly controlled diet and exercise program.

Due to a toxic component called coumarin, European health agencies have warned against consuming high amounts of cassia.

Other possible toxins founds in the bark/powder are cinnamaldehyde and styrene.