

Title:

- *Curcuma* (genus).

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Source:

- Salem Press Encyclopedia of Science, 2023. 3p.

Document Type:

- Article

Subject Terms:

- [Therapeutics](#)
- [Curcuma](#)
- [Turmeric](#)

Abstract:

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Full Text Word Count:

- 1253

Accession Number:

- 133861313

Curcuma (genus)

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1867 botanical print of *Curcuma australasica*. "Image courtesy Missouri Botanical Garden. <http://www.botanicus.org>". [CC BY 3.0 (<https://creativecommons.org/licenses/by/3.0>)], via Wikimedia Commons



Curcuma 'Red Emperor' Krzysztof Ziarnik, Kenraiz [CC BY-SA 4.0 (<https://creativecommons.org/licenses/by-sa/4.0>)], from Wikimedia Commons

Background

The plants in the *Curcuma* genus have rhizomes. These are thick, fleshy stems that grow under the ground and parallel to it. Leaves and flowers branch upward from lateral shoots that grow from nodes on the rhizome, while roots grow downward from other nodes. Nodes are the small bumps on the main stem or rhizome of a plant located in the spots where leaves and flowers will form.

Curcuma is part of the Zingiberaceae plant family. This is the plant family that includes ginger, a popular spice that has been used for centuries to season food and in many natural health remedies in Asian cultures. Both ginger and *Curcuma longa*, or turmeric, as well as several other plants in the Zingiberaceae family, are important elements in the Indian system of medicine known as Ayurveda. In the twenty-first century, elements of Ayurveda are increasingly being used as alternative health treatments in other cultures as well.

Overview

Members of the *Curcuma* genus can grow between 2 and 7 feet (.60 and 2 meters) in height and have bold, thickly veined leaves that grow upward from nodes in the rhizome. The inside of the rhizome can be shades of white and cream or be colored yellow, orange, or variations of blue or green. The leaves can be a solid green, variegated with multiple shades of green, or have a red streak in the middle of a green leaf.

Curcuma plants can be distinguished from other members of the Zingiberaceae family by differences in the flowers. In between the upright leaves, the plants will grow flowers that resemble an unusually colored pine cone growing straight up on a thick spike called a pseudostem. These pseudostems are closer in form to succulents than they are to the stems on other flowering plants. The flowers that grow on these stems are what give the plants their common name, hidden cone ginger. This is because the showier “flowers” are actually a plant part known as a bract, or a leaf that gives the appearance of being a flower. These bracts join near the stem to form distinctive pouches. The plants’ true flowers are smaller and hidden lower on the stem. Other members of the Zingiberaceae family do not have bracts like these.

In the warm tropical climate of their native habitats, the *Curcuma* plants experience active growth during the monsoon season in July through September and go dormant during the drier seasons. Well-drained soil that is

slightly acidic and receives a few hours of sun a day encourages blooming, as does tropical summer heat. The plants can form seeds in the wild but are most commonly propagated by digging up and dividing the rhizome to make two or more plants. Some gardeners grow them in pots, but they need careful attention to ensure the rhizome does not grow too large for the pot.

There are more than one hundred variations of plants in the *Curcuma* genus. Among the most popular are *Curcuma elata* , *Curcuma myanmarensis* , *Curcuma ornata* , *Curcuma zedoaria* , and *Curcuma longa* . Some of the other plants in the genus also go by other names, most commonly Siam tulip, Indian saffron, and hidden lily.

Most of these plants are purely ornamental, with attractive foliage and plant bracts and flowers that grow in white as well as shades of yellow, pink, orange, and burgundy. In both their native countries and in other areas of the world with temperate climates or where they can be protected in cold weather, many *Curcuma* plants are grown for their beauty. Others are grown for their fragrance, including some that are grown to harvest essential oils. Several are grown for various health purposes. For example, *Curcuma amada* (mango ginger) is thought to reduce inflammation and is sometimes used as a contraceptive in Asian countries. *Curcuma zedoaria* (white turmeric) is used to help reduce flatulence. *Curcuma longa* is increasingly grown to harvest fresh turmeric, which is sometimes called the world's healthiest spice.

Turmeric is used in a wide variety of foods and drinks, many of Indian origin. The source of the spice is the plant's rhizome. In its dried and powdered form, turmeric is a vibrant yellow color. Because of this, it has been used in makeup and as a natural dye for fabric and other items. It is also what gives curry its distinctive yellow color. Turmeric is also used in its fresh form. Sections of the rhizome are cut and used sliced, grated, or crushed to add to food and beverages.

The almost eighty variations of *Curcuma longa* have also been credited with having many natural medicinal purposes. Its use in Asian medicine dates back at least four thousand years. It has been used to treat inflammation and pain, reduce blood pressure, help with some stomach conditions, reduce the symptoms of arthritis, and combat Alzheimer's disease. Some people have claimed that the spice can help treat cancer, and research has been undertaken to determine its effectiveness and safety for this use. Alternative medicine practitioners also use turmeric as a treatment for skin conditions such as eczema and to combat such diverse conditions as periodontal disease, bad breath, gallstones, heart disease, carpal tunnel syndrome, tendonitis, and liver disease. Some veterinarians have also considered the medicinal possibilities of turmeric.

Bibliography

Carey, Dennis, and Tony Avent. "Curcuma Longa: Grow Turmeric in Your Garden." *Plant Delights Nursery* , June 2012, www.plantdelights.com/blogs/articles/curcuma-longa-turmeric-plant-zedoaria-ginger. Accessed 5 Nov. 2018.

"Classification for Kingdom Plantae Down to Genus Curcuma L." *United States Department of Agriculture Natural Resources Conservation Service* , plants.usda.gov/java/ClassificationServlet?source=display&classid=CURCU. Accessed 5 Nov. 2018.

"Curcuma." *Pacific Bulb Society* , www.pacificbulbsociety.org/pbswiki/index.php/Curcuma. Accessed 5 Nov. 2018.

"Curcuma." *Science Direct* , www.sciencedirect.com/topics/agricultural-and-biological-sciences/curcuma. Accessed 5 Nov. 2018.

Sidhe, Willow. "The Benefits of Curcuma." *Livestrong* , 14 Aug. 2017, www.livestrong.com/article/135427-the-benefits-curcuma/. Accessed 5 Nov. 2018.

Sirirugsa, P., et al. "The Genus Curcuma L. (Zingiberaceae): Distribution and Classification with Reference to Species Diversity in Thailand." *Gardens' Bulletin Singapore* , 2007,

www.nparks.gov.sg/sbg/research/publications/gardens-bulletin-singapore/-/media/sbg/gardens-bulletin/4-4-59-1-2-19-y2007-v59-p1-p2-gbs-pg-203.pdf. Accessed 5 Nov. 2018.

Sun, W., et al. “Chemical Constituents and Biological Research on Plants in the Genus *Curcuma*.” *Critical Reviews in Food Science and Nutrition*, vol. 57, no. 7, 2017, pp. 1451–1523.

“Turmeric.” *Cancer Research UK*, 24 Oct. 2018, www.cancerresearchuk.org/about-cancer/cancer-in-general/treatment/complementary-alternative-therapies/individual-therapies/turmeric. Accessed 5 Nov. 2018.

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