

MALNAD COLLEGE OF ENGINEERING

(An Autonomous Institution under Visvesvaraya Technological University, Belagavi)

Hassan – 573202, Karnataka, India



Social Connect and Responsibility

(22AI308)

Activity Report on:

“Plantation and Adaptation of Kadamba Plant”

Place : Boys Parking slot, MCE, Hassan.

Under the guidance of

Ms. Sushma M V

Assistant Professor, Dept. of CSE (AI&ML)

**Department of Artificial Intelligence and Machine Learning
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PLANTATION AND ADOPTION OF KADAMBA TREE

INTRODUCTION:

Students were organized into groups, and each group participated in a hands-on activity by planting 'KADAMBA' plants in front of the boys' parking area. This initiative aimed to enhance the greenery and aesthetics of the campus. Following the planting activity, each group took turns giving presentations on various plant species, sharing insights on their characteristics, benefits, and suitable environments for growth. The presentations not only contributed to the knowledge about diverse plant species but also fostered an awareness of the importance of environmental sustainability within the college community. This collaborative effort demonstrated the integration of practical experiences, environmental consciousness, and educational components in the SCR class, promoting a holistic understanding of ecological considerations and beautification efforts on campus.

PLANT DESCRIPTION [KADAMBA PLANT]:

Appearance:

Size: A mature kadamba tree can reach an impressive height of 45 meters (148 feet) with a broad, umbrella-shaped crown.

Image of Kadamba tree full grown Opens in a new window

Kadamba tree full grown

Trunk: The trunk is straight and cylindrical, with a diameter ranging from 100 to 160 centimeters (39 to 63 inches). Its bark is dark grey, rough in texture, and often flakes off in thin scales.

Leaves: The leaves are large, glossy green, and oblong-shaped, measuring up to 30 centimeters (12 inches) in length and 10-15 centimeters (4-6 inches) in width. They are arranged oppositely on the branches.

Flowers:

Color: The most striking feature of the kadamba tree is its beautiful flowers. They are a vibrant orange color with a sweet, fragrant smell.

Image of Kadamba tree flower Opens in a new window

Kadamba tree flower

Blooming: Flowering typically begins when the tree is 4-5 years old and occurs throughout the year, particularly during the rainy season.

Arrangement: The flowers are densely packed in spherical clusters about 5.5 centimeters (2.2 inches) in diameter, resembling large, fluffy balls.

Other characteristics:

Growth: The kadamba tree is a fast-growing species, reaching maturity within 10-15 years.

Habitat: It thrives in warm, humid climates and prefers well-drained, fertile soil.

Uses: The kadamba tree has various uses, including:

Medicinal: In traditional medicine, various parts of the tree are used for their purported healing properties.

Timber and paper production: The fast-growing nature and lightweight wood make it suitable for these purposes.

Ornamental: The beautiful flowers and foliage make it a popular choice for landscaping.

Religious significance: The kadamba tree holds special significance in Hinduism and other religions in India.

HISTORY OF CULTIVATION:

Ancient references:

Literary mentions: The kadamba tree finds mention in various ancient Indian texts like the Bhagavata Purana, suggesting its presence and significance in early Indian culture.

Kadamba dynasty (345-525 CE): Named after the tree, this South Indian dynasty further highlights its historical and cultural importance.

Possible reasons for planting:

Religious significance: Hindus associate the kadamba tree with Lord Krishna and consider it sacred. Planting near temples or homes might have been practiced out of devotion.

Medicinal properties: Traditional Indian medicine, Ayurveda, utilizes various parts of the kadamba plant. Planting for medicinal purposes could have been prevalent.

Aesthetics and fragrance: The beautiful flowers and pleasant aroma likely made the kadamba tree a desirable choice for landscaping in gardens and palaces.

Timber and other uses: While not the primary purpose in ancient times, the fast-growing nature and versatile wood of the kadamba might have led to its cultivation for later use in construction or paper production.

Limited specific details:

While we have these indications, pinpointing the exact origin and practices of planting kadamba trees is challenging due to limited historical records focusing specifically on this aspect.

CULTIVATION:

Propagation:

Kadamba trees can be propagated by seeds or stem cuttings.

Seeds: Seeds should be sown in a well-drained seedbed filled with a mixture of sand and soil. The seeds germinate in about three to four weeks. Once the seedlings are a few inches tall, they can be transplanted into individual pots or into the ground.

Image of Kadamba tree seeds [Opens in a new window](#)
ebay.com

Kadamba tree seeds

Stem cuttings: Stem cuttings should be taken from healthy, mature trees. The cuttings should be about 6-8 inches long and have several nodes. The cuttings can be planted in a well-drained potting mix and kept moist until they root.

Planting:

Kadamba trees prefer well-drained, fertile soil in a sunny location. They are tolerant of a wide range of

soil types, but they will not tolerate waterlogged conditions. The trees should be planted at a spacing of 5-6 meters apart.

Care:

Kadamba trees are relatively low-maintenance once they are established. They will need to be watered regularly during their first year, but after that, they can be watered only during periods of drought. The trees can be fertilized once or twice a year with a balanced fertilizer.

Pests and diseases:

Kadamba trees are relatively resistant to pests and diseases. However, they can be susceptible to attacks by aphids, scale insects, and fungal diseases. If you notice any pests or diseases on your trees, you can treat them with insecticidal soap or neem oil.

With proper care, kadamba trees can live for hundreds of years. They are a valuable addition to any landscape, providing beauty, shade, and valuable wood.

USES :

Traditional medicine:

The bark and leaves of the Kadamba tree are used in Ayurvedic medicine to treat a variety of ailments, including:

Wounds and inflammation: The leaves are applied topically to wounds to promote healing and reduce inflammation.

Diarrhea and dysentery: A decoction made from the bark is taken orally to treat diarrhea and dysentery.

Diabetes: The leaves are believed to help regulate blood sugar levels.

Snakebites: The bark is used as an antidote to snakebites.

Cancer: Studies have shown that the Kadamba tree may have anti-tumor properties.

Image of Kadamba tree [Opens in a new window](#)

en.wikipedia.org

Kadamba tree

Cosmetics: The fragrant flowers of the Kadamba tree are used in the production of perfumes and incense.

Timber: The wood of the Kadamba tree is strong and durable, and is used for making furniture, boats, and other construction materials.

Food: The flowers of the Kadamba tree are sometimes eaten raw or cooked in Southeast Asia.

CONCLUSION:

The planting of kadamba trees likely has a long history in South Asia, driven by a combination of religious reverence, potential medicinal uses, aesthetic appreciation, and later, its utility for timber and paper. However, further research and exploration of historical sources might be needed to unravel a more detailed timeline and specific practices surrounding its cultivation.

