

Divine Botany: Unveiling the Religious and Cultural Importance of Plants in Odisha

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Abstract: Divine Botany: Unveiling the Religious and Cultural Importance of Plants in Odisha” explores the intricate relationship between flora and spirituality in the cultural landscape of Odisha, India. This review article delves into the profound religious and Cultural significance: of plants, shedding light on their roles in rituals, mythologies, and everyday practices. Through an interdisciplinary lens, it examines how plants are deeply intertwined with religious beliefs, serving as symbols of divinity, fertility, and prosperity. The article examines the specific botanical species revered in Odisha, such as the Sacred Fig (*Ficus religiosa*), Neem tree (*Azadirachta indica*), and Tulsi plant (*Ocimum sanctum*), among others, elucidating their roles in Hindu rituals and ceremonies. It also delves into the mythological narratives surrounding these plants, tracing their origins and symbolism in Hindu and Buddhist traditions. Furthermore, the review discusses the cultural practices associated with plants in Odisha, including rituals, festivals, and everyday customs. It explores how plants are integrated into various aspects of life, from agricultural practices to medicinal remedies, highlighting their multifaceted significance in Odia society. Overall, “Divine Botany” offers a comprehensive exploration of the rich tapestry of botanical traditions in Odisha, providing insights into the deep-rooted connections between plants, religion, and culture in the region.

Keywords: Divine Botany, Religious significance of plants, Flora and spirituality, Rituals and mythologies, Cultural practices.

Background

Plants have long held a sacred place in human cultures, serving as symbols of life, fertility, and spiritual connection. In the verdant landscapes of Odisha, a state rich in cultural heritage and religious traditions, the intertwining of flora with faith is particularly pronounced. From ancient rituals to contemporary practices, the religious and cultural importance of plants in Odisha is deeply ingrained in the collective

consciousness of its people. In this review article, titled “Divine Botany: Unveiling the Religious and Cultural Importance of Plants in Odisha,” we embark on a journey to explore the intricate relationship between plants and spirituality in this region. Through an interdisciplinary lens, we delve into the myths, rituals, and traditions that elevate certain plants to revered status, shedding light on their significance in religious ceremonies, festivals, and everyday life. Drawing upon historical texts, folklore, and ethnographic studies, we seek to unravel the mysteries surrounding plant worship and botanical symbolism in Odisha. From the towering Banyan trees to the delicate lotus flowers, each plant species carries its own narrative, woven into the tapestry of Odisha’s cultural landscape. Join us as we navigate the lush forests, vibrant temples, and sacred groves of Odisha, where the divine presence of plants continues to shape the spiritual identity of its people. Through this exploration, we aim to deepen our understanding of the profound connections between humanity and the botanical world, rooted in ancient wisdom and perpetuated through generations. Sacred plants are ubiquitous across different regions of Odisha, each carrying its own religious and cultural significance. Below, we explore the diverse botanical treasures of Odisha and elucidate their profound importance in local traditions and spirituality.

Azadirachta indica (Neem)

Religious Practices: Neem, known as *Azadirachta indica*, holds significant cultural, medical, and mythological importance, particularly in South Asia. It is linked to the Vaishnava saint Chaitanya Mahaprabhu and is known as Daru Brahma in Odisha. Neem is used to create idols of Lord Jagannath, Goddess Subhadra, and Lord Balabhadra every 12 years, marked by distinctive symbols.

Cultural Practices: Neem is revered as a sacred and auspicious tree in many cultures, often associated with deities and religious rituals. Its leaves are valued for treating skin disorders and burning them is believed to ward off evil spirits. The tree is also seen as a symbol of resilience, protection, purity, and well-being, and is sometimes identified with the goddess Durga. Neem’s significance is reflected in folklore and traditional practices.

Datura metel (Dhatuira)

Religious Practices: *Datura metel* is associated with Shiva worship. It is believed to have emerged from Shiva’s chest after he consumed the deadly poison halahal during the cosmic ocean churning (Kapoor 2019). Its fruits and leaves are offered to Shiva, especially on Shiv-Ratri and Mondays, reflecting its importance in rituals and its link to the Vedic narrative of Samudra manthan. In Odisha this flower along with its fruit is offered to Lord Shiva on every Monday throughout the year.

Mythology and Cultural significance: *Datura metel* is known for its toxicity and hallucinogenic properties, leading to its use in shamanic and ritualistic practices (Wikipedia). It is associated with the moon and has mystical significance, often used in ceremonies to induce spiritual experiences and ward off evil spirits. However, due to its potential dangers, it is used with specific rites and safeguards in various cultures.

Calotropis gigantea- procera (Arakha)

Religious Significance: Known as the madar or crown flower, *Calotropis gigantea* is cherished by Lord Shiva according to the Shiva Purana (Soni et al 2019). Its garlands are offered to Shiva for societal stability, prosperity, and peace. The crown flower is also one of the Navagraha trees in astrology. In the Mahabharata, the leaves of the arka plant (*Calotropis*) cause blindness in Upamanya, a disciple of rishi Ayoda-Daumya. Despite its toxicity, the flower is considered auspicious and is regularly offered to Lord Shiva in Odisha. *Calotropis procera*, known as the apple of Sodom, lacks prominent mythological references but is recognized in traditional medicine and cultural contexts for its therapeutic properties.

Cultural significance: *Calotropis procera* is revered in some cultures and used in religious ceremonies, though its toxicity necessitates careful handling. It is sometimes used metaphorically in art and literature to symbolize resilience or the duality of beauty and danger.

Curcuma longa (Turmeric)

Religious Offerings: Turmeric, a flowering plant from the ginger family, holds significant cultural and traditional importance in South Asia. It is used in religious rites, symbolizing purity and protection. Turmeric is seen as a symbol of prosperity and well-being, often used to cleanse areas and individuals during ceremonies.

Cultural Symbolism: In South Asian wedding rituals, turmeric is applied to the bride and groom in the Haldi ceremony, believed to enhance complexion and bring auspiciousness. Turmeric is also associated with purification in various rituals. Its traditional uses span medicine, cuisine, and cultural events. In Odisha, turmeric leaves are used to make Haldi Pitha, a traditional dish. The practice of applying turmeric paste before marriage highlights its role in enhancing skin brilliance and preventing skin problems.

Ocimum sanctum (Tulsi)

Religious Significance: *Ocimum sanctum*, commonly known as Holy Basil or Tulsi, is a sacred plant in Hinduism with deep cultural, religious, and therapeutic importance. It is considered the embodiment of the goddess Tulsi and is revered through daily rituals

and prayers. The annual ceremonial marriage of Tulsi and Lord Vishnu, called Tulsi Vivah, marks the beginning of the Hindu wedding season and takes place on the 11th or 12th day of the bright half of the Kartik month (*Underhill 1991*). *Garland of Tulsi leaves is offered every day to Lord Jagannath in Puri, a garden of Tulsi is found inside temple of Lord Jagannath. Usually Tulsi leaves are offered to Lord Vishnu in all type of religious puja's related to him.*

Mythology and Cultural significance: In Hindu mythology, Tulsi is seen as an incarnation of the goddess Tulsi or Vrinda. The Vishnu Purana narrates that Vrinda became the Tulsi plant following a curse involving Lord Vishnu (*Wilkins 2003*). The plant is believed to bring blessings from Radha and Krishna when planted at home and is a symbol of purity, thought to purify the environment and repel negative energy. Holy basil is used in rituals for the dying to elevate their souls and is placed on funeral pyres to ensure the deceased reaches moksha (liberation from the cycle of reincarnation). It is also believed to protect homes from evil spirits and bring prosperity.

Folklore and Legends: Tulsi is linked to various deities and traditions. It is said that Goddess Lakshmi resides where Tulsi grows, bringing wealth and success. Another legend connects Tulsi to Hanuman, who served Lord Rama by disguising himself as a monkey. Vaishnavites, followers of Vishnu, hold Tulsi in high regard, and it is believed that Lord Krishna wears a garland made of Tulsi leaves and flowers. The plant is considered to enhance devotion, meditation, and provide protection (*Flood 2001*).

Mangifera indica (Mango)

Religious Significance: Mango leaves are integral to Hindu rituals and ceremonies, often used to make garlands and decorate homes during festivals and celebrations of Ganesh puja and Saraswati puja. In regions where mangoes are a significant crop, agricultural festivals celebrate the mango harvest with ceremonies, feasts, and cultural performances. The mango is featured in traditional art, literature, and poetry, symbolizing beauty, sweetness, and life's pleasures. Offering mangoes is seen as a gesture of kindness and hospitality during festivals and special occasions. The mango tree is a national symbol of Bangladesh and the national fruit of Pakistan, India, and the Philippines (*Wikipedia 2013*). In Odisha the first fruit of the year- Mango is first offered to movable idol of Radhakrishna on small chariot which is taken from one house to another house in Dola purnima(Holi) and also in some parts of Odisha it is offered to Lord first during Pana Sankranti then consumed by peoples. Before the mango tree start blossoming in Odisha, it is said that Baula Amawasiya is the day when mango tree starts blossoming from that day of the year.

Mythology and Cultural significance: Known as the "king of fruits," the mango holds a prominent place in many cultures' culinary traditions, representing abundance,

fertility, and success. The mango is associated with love and fertility, with Kamadeva, the god of love, said to use the mango flower as an arrow. The mango is also seen as a symbol of the sun, with its leaves used in various religious rituals.

Shorea robusta (Sal)

Religious significance: *Shorea robusta*, known as the Sal tree, is native to the Indian subcontinent and holds significant cultural, religious, and ecological importance, particularly in Hinduism and Buddhism. The Sal tree is featured in Indian temple architecture, such as the “Sal tree maiden” or Salabhanjika sculptures. In the Ramayana, Lord Rama demonstrates his prowess by piercing seven Sal trees with a single arrow, which he later uses to kill Vali and Kumbhakarna (Krishna & Amirthalingam 2014). In Buddhist tradition, it is said that Buddha died lying between two Sal trees. The Sal tree’s leaves are considered auspicious in Hindu rituals and used in offerings and temple worship (*Thanissaro 2015*.) In Odisha, Sal wood is used in yajanas and homas, while the bark’s latex (jhuna) is burned during puja. The leaves are also used to make traditional dishes for serving food at religious ceremonies. Sal tree resin is used as an astringent in Ayurvedic medicine, burned as incense in Hindu ceremonies, and used to caulk boats and ships (*Panda 2011* & chest of books.com).

Mythology and Cultural Uses: The Sal tree is associated with several deities in Hindu mythology and is considered sacred (Ritschl & Schleberger 1989). A common ornamental motif in Hindu sculpture features a Yakshini placing her foot against the roots of a blossoming tree while clutching its branch. In some regions, Sal trees are protected in sacred groves, emphasizing their revered status (Schumann 2005).

Santalum album (Chandana)

Religious and Spiritual Significance: Sandalwood holds immense religious significance, especially in Hinduism. It is sacred and frequently used in religious rites and rituals (*ayurveda-sedona.com.2017*). The fragrant paste made from sandalwood is applied to deities and believed to purify the environment. Sandalwood is associated with deities such as Lord Vishnu, and it is thought to house the goddess Lakshmi. Known as Chandana in Sanskrit, sandalwood is considered sacred in Hindu Ayurveda and used for deity worship, with a belief that the goddess Lakshmi resides within the tree (Sandeep & Manohara 2019). In Odisha, during the annual illness of Lord Jagannath after Sana Purnima, the statue is covered in sandalwood paste to keep him cool during the fever that Lord suffers.

Cultural and Mythological Practices: Sandalwood is used to make incense and ceremonial oils, and its fragrant wood is carved into religious artifacts like prayer beads and figurines (*Lopez et al 2018*). The paste is applied to the forehead during religious

rites, deemed auspicious. Historically, sandalwood has been used to construct temples, palaces, and religious monuments. The paste, made by grinding the wood against a stone slab, is used in religious rituals, meditation, and prayer, believed to calm the mind. Devotees apply the paste to their necks, chests, and foreheads (*Kew.org*. 2018). In Tirupati, sandalwood paste is used after sacred tonsure to preserve the skin. In Ayurveda and Hinduism, sandalwood is thought to help people connect with their spiritual side, making it one of the most frequently used religious artifacts in Vedic and Hindu communities.

Aegle marmelos (Bael)

Religious significance: The Bael tree holds significant religious importance in Hinduism. Its leaves are used to honor Lord Shiva's symbol, the lingam, and are integral to Hindu rituals. (Peg 2003). The tree is considered sacred and associated with the goddess Lakshmi in the Rig Vedic Shrikram, which describes it as her abode. Bael trees are also believed to embody the goddess Sati (Panda 2002). The fruit and leaves are essential in the worship of Lord Shiva, with the trifoliate leaves symbolizing his trident. The Bael tree is commonly found near Shiva temples, reflecting its sacred status. In Odisha the bael fruit's pulp is used to make Pana in Pana Sankranti. Along with this pulp –curd, black pepper, coconut grated, different fruits are mixed and served to people as a serve to lord.

Mythology Aspect: In Hindu mythology, the Bael tree is deeply linked to Lord Shiva. Despite a curse from Goddess Lakshmi making the Bael tree initially unfit for worship, Lord Shiva claimed it as his own, pleased with its dedication. This association made the Bael tree a symbol of Lord Shiva's presence. (Bakhru 1995). The trifoliate leaves are especially significant as offerings in Shiva worship, symbolizing his trident (trishul). Additionally, in some cultural practices, girls are symbolically "married" to the Bael fruit, ensuring they remain unmarried by widowhood as long as the fruit remains intact (Lim 2012). The Bael tree's sacred and mythological significance underscores its role in Hindu religious practices and its revered status among devotees.

Ficus religiosa (Peepal)

Religious significance: *Ficus religiosa*, known as the Sacred Fig or Bodhi tree, holds profound religious significance in Hinduism, Buddhism, and Jainism. It is native to the Indian subcontinent and Indochina and is part of the Moraceae family (Flowers of India 2012). The tree is revered by Hindus and Jains, who often meditate beneath it. The most notable religious significance of the Bodhi tree is in Buddhism, where Gautama Buddha attained enlightenment while meditating under it in Bodh Gaya, Bihar, India. The sacred fig is also the state tree of Odisha, Bihar, and Haryana Hindu ascetics (*State*

symbols) known as sadhus, meditate beneath sacred fig trees, and Hindus perform a ritual called Radhakshina, which involves circumambulation of the tree as a symbol of devotion. Women often circumambulate the Peepal tree for blessings of children or to attain a desired outcome. The tree is especially revered on Saturdays during the month of Shravana, as it is believed that goddess Lakshmi sits beneath it on this day. Watering the tree is said to bring merit, forgiveness of sorrows, and cures for ailments. (Chen 1952)

Mythology and Cultural significance: The Bodhi tree symbolizes Pushya, a star in the Cancer constellation, and is also referred to as Plaksa in Sanskrit. Hindu scriptures, including the Skanda Purana, describe the Sarasvati River originating from the Plaksa tree, highlighting its mythological importance (Chauhan et al 1999). The Brahma Purana and the Padma Purana recount how Vishnu hid in the Peepal tree when demons conquered the gods, allowing for its worship without an image or temple (Strong 1983). The Upanishads use the fruit of the Peepal tree as a metaphor for the body and soul, with the body being like the fruit and the soul like the seed (Dutt 1901). The Peepal tree is sacred in Hindu mythology, often associated with deities such as Vishnu and Lakshmi, and is involved in various rituals and prayers.

Phyllanthus emblica (Amla)

Phyllanthus emblica, commonly known as Indian gooseberry or Amla, holds significant religious, cultural, and medicinal importance. In Hinduism, it is used in rituals and festivals, symbolizing good fortune and prosperity.

Religious and Cultural Significance

Hinduism: Amla is considered sacred in Hinduism and is often used in religious rituals and sacrifices to deities. It is believed to have spiritual significance, leading many to plant Amla trees near temples or in their home (Chen 1952). Amla fruit garlands are often presented to Lord Radha-Krishna as a devotional offering. It is a symbol of good fortune and prosperity. In Odisha, during the Kartika month, the festival Amla Navami is celebrated, where Amla is dedicated to Lord Radha Krishna. Women offer water to the Amla tree daily, believing it to be inhabited by 35,000 gods and goddesses.

Mythological Aspect

Buddhist Literature: The ancient Indian emperor Ashoka is noted for giving the Buddhist sangha half an Amla fruit as his final gift, illustrating its value and significance in Buddhist traditions (Strong 1983). Amla fruit appears frequently in Buddhist texts. It is used metaphorically to describe the comprehensive scope of the Buddha's mind, likening it to holding an Amla fruit in one's hand (Dutt 1901). In Theravada Buddhism,

it is believed that the twenty-first Buddha, Phussa Buddha, used the Amla tree to achieve enlightenment, or Bodhi.

Piper betel (Paan)

Religious significance

Hindu Rituals: Betel leaves are integral to various Hindu rituals and ceremonies. In Odisha, they are used in yajanas (sacred fire rituals) to pour ghee into the fire (Agni), symbolizing an offering to the gods (Wikipedia). Betel leaves, or tambula, are offered to deities like Ganesh and Goddess Saraswati during pujas (worship ceremonies). Betel leaves are associated with various deities and are used in offerings and rituals to honour them. **Ancestor Worship:** During the Sharada festival in Odisha, betel leaves are used in the ritual of offering bidiya pana to ancestors, a gesture of respect and remembrance.

Mythological Significance

According to Hindu mythology, betel leaves emerged during the cosmic event known as Samudra Manthan, the churning of the ocean by the gods and demons to obtain amrita, the nectar of immortality. The betel leaves are considered a divine offering that appeared from the ocean during this event.

Cultural Significance

Marriage Rituals: In South Asian marriage ceremonies, betel leaves symbolize purity and are used to signify the union of the bride and groom. They are exchanged as part of the wedding rituals, representing the joining of two families. In Bengali weddings, brides are often carried to their husbands with their faces covered by betel leaves, a traditional gesture symbolizing modesty and purity (Wikipedia). Betel leaves are frequently depicted in traditional art forms, literature, and folklore. They are symbols of fertility, prosperity, and good luck. **Hospitality and Good Fortune:** In various cultures, betel leaves are used to greet and bless individuals, symbolizing hospitality, respect, and good fortune (Wikipedia).

Musa acuminata (Kela)

Musa acuminata, known for the widely consumed Cavendish banana, holds religious and cultural importance in South and Southeast Asia. The plant symbolizes fertility and abundance, playing a crucial role in festivals, weddings, and religious practices (Earthst Oriez 2017).

Religious Symbolism

Association with Deities: In Hinduism, the Banana plant is associated with various deities. Lord Vishnu is sometimes depicted standing on a banana leaf, and the plant is also linked to Lord Ganesha, symbolizing wisdom and success. Banana is commonly offered to deities during Hindu rituals as a token of devotion. The fruit is second only to the Coconut in religious offerings (EarthstOriez 2017). Banana leaves are used as serving plates or vessels in South and Southeast Asian cultures, emphasizing their utility and significance in rituals and daily life. In Odisha and other states, banana plants are used decoratively during pujas (religious ceremonies), with pairs of banana plants placed on either side of doors or walls during weddings. Prasadam (sacred food) is often served on fresh banana leaves to pilgrims (Earthst Oriez 2017).

Cultural Symbolism

Fertility and Abundance: The banana plant symbolizes fertility due to its rapid growth and year-round fruit production. It is associated with abundance and is linked to various fertility deities in certain traditions (EarthstOriez 2017).

Oriyan tribal legend

According to an **Oriyan tribal legend** the plant was the creation of Bimma. As the plant bore nourishing fruit and every part of it was useful, Rama became jealous of Bimma's creation and cursed it to die after producing only one bunch of flowers. But this is not a fact. The Banana plant is a perennial plant and produces flowers and fruits season after season. The banana fruit is offered by certain tribes of Orissa and Madhya Pradesh to gods Kittungsum and Mardisum and is used in all religious and marriage ceremonies (EarthstOriez 2017). **Festivals and Celebrations:** Bananas play a significant role in Hindu festivals and celebrations. In South Indian weddings, especially Tamil weddings, banana trees are tied together to form an arch, symbolizing a blessing for a long and fruitful married life (Indian Mirror 2019).

Madhuca indica (Mahula)

Madhuca indica, commonly known as the Mahua tree, holds cultural and mythological significance, particularly in India. According to Hindu mythology, the association of Apsaras with the Mahua tree adds a celestial dimension to its symbolism. Among tribal communities, Mahua is deeply ingrained in cultural customs, rituals, and traditions.

Mythology and Cultural Significance

Apsaras and the Mahua Tree: According to Hindu mythology, Apsaras (celestial nymphs) are associated with the Mahua tree. Legend has it that Apsaras emerged from

the churning of the ocean (Samudra Manthan), and the Mahua tree sprouted from the earth where their footsteps landed. This connection infuses the Mahua tree with celestial and divine qualities. Mahua holds significant cultural importance among various tribal communities in India. It is intertwined with rituals, ceremonies, and traditional practices, reflecting its deep-rooted presence in indigenous cultures.

Religious Practices: Offerings to Deities: In certain regions, Mahua flowers are offered to deities during religious rites. These flowers symbolize purity and divinity, enhancing the spiritual significance of the offerings. Mahua trees are often found in holy groves, which are areas of land revered for their spiritual or religious significance. These groves may be dedicated to specific deities or serve as sacred grounds for various rituals and ceremonies.

Artocarpus heterophyllus (Panasa)

Artocarpus heterophyllus, commonly known as jackfruit, holds cultural and gastronomic significance across various regions. While it lacks specific mythology, jackfruit may symbolize fertility, prosperity, or other cultural ideals in some cultures.

Religious and Cultural Practices

Symbolic Significance: While *Artocarpus heterophyllus*, or jackfruit, lacks specific mythology, it holds cultural and gastronomic significance in many regions. In some cultures, jackfruit may symbolize fertility, prosperity, or other cultural notions, contributing to its symbolic importance.

Mythological Significances

Festivals and Offerings: Jackfruit leaves are utilized in the Shardha ritual, a puja for deceased ancestors in Odisha, showcasing its involvement in religious ceremonies. Additionally, in places like Odisha, ripened jackfruit is consumed and offered to gods as Prasad during festivals such as Rajo and Sabitri Pujas. The presence of jackfruit in religious festivals and offerings may vary based on regional customs and practices.

Citrus lemon (Lembu)

Religious significance: Lemons are integral to many festivals and rituals. They are used in culinary preparations, with lemon slices or wedges added to beverages during special occasions. While Citrus lemon, or lemon, may lack deep mythological roots, its Cultural significance: is rich and diverse. ○○○

Cultural Practices: Lemons, particularly in certain cultures, are believed to possess protective qualities against evil spirits. They are strategically placed in homes

to imbue positive energy and ward off negativity. In India, lemons are incorporated into rituals like vehicle blessings, where new automobiles are driven over them after a temple puja, and outside shops, where strings of three lemons are replaced weekly to safeguard against malevolent forces. Lemon's association with fertility is prevalent in various cultures, leading to its use in family and childbirth rituals.

Corchorus capsularis (Jhuta)

Religious significance: In Odisha, jute's significance extends to ritualistic practices during Diwali's poya-shradha, where the plant's stick is employed to invoke and honor ancestors, highlighting its role in cultural ceremonies and observances. This ritual is also performed by peoples in front of Lord Jagannath temple in Puri.

Cultural Practices

Jute, or *Corchorus capsularis*, has been traditionally utilized in various cultures for specific purposes. For instance, jute sacks have long been employed for packaging and storing grains due to the material's durability and strength. Additionally, jute twine finds widespread use in crafts and gardening activities, reflecting its versatility in traditional applications.

Butea monosperma (Palasha)

Butea monosperma, or Palash, also known as Flame of forest (Sacredtreesbhu 2019), holds significant cultural and religious importance in various regions, particularly in Odisha. Its association with Hindu deities, symbolic role in festivities, and traditional uses in rituals and celebrations underscore its deep-rooted significance in both religious and cultural contexts.

Religious Significance

Symbolism in Festivities: *Butea monosperma*, commonly known as Palash, carries significant religious symbolism in various regions, particularly in Odisha. Its flaming red blossoms are integral to religious ceremonies and decorations during spring festivities, symbolizing the onset of a new season. **Association with Deities:** Palash is revered as a manifestation of Agni, the Hindu god of Fire and War. The tree's flowers are specifically used to honor Lord Shiva during the Shivaratri festival in Odisha, showcasing its sacred significance in Hindu rituals and observances. **Cultural Practices:** Palash flowers are dried and crushed to produce colors used in the Holi festival, emphasizing its cultural importance in traditional celebrations and customs (Wikipedia).

Cultural Significance

Reverence in Folklore: According to Vayupurana, *Butea monosperma* sprouted from Yama's right torso, linking it to ancient mythological narratives. Both Hindus and Buddhists hold reverence for this majestic tree. Traditional Uses: The flowers of Palash are utilized to produce a traditional Holi color known as "Kesari," as well as dyes for fabrics. Butein, a dye derived from the flowers, is primarily used for coloring silk and cotton, and is also employed in Hindu rituals, such as marking foreheads with vibrant hues (Wikipedia).

Curcuma angustifolia (Palua)

Curcuma angustifolia, commonly known as East Indian Arrowroot or Wild Turmeric, is predominantly found growing wild in various regions of India. It thrives especially in the northeast and on the western shores and hills (Ravindran 2007).

Religious Significance: In Odisha, *Curcuma angustifolia* is specifically found in the Mayurbhanj and Keonjhar districts. Cultural and Religious Practices: Starch Production: The starch produced by this plant in the Odia language is known as "Palua." Pana Sankranti: During the Pana Sankranti festival in Odisha, people consume Palua as a form of Pana, typically in the form of Jhili produced from palua. Offerings: Palua is also served as Bhog to the demi-goddess Maa Tarini at the temple in Keonjhar District of Odisha.

Cultural significance: The usage of *Curcuma angustifolia*, particularly in the form of Palua, is deeply embedded in the cultural and religious practices of Odisha, serving both as a culinary delicacy and as an offering in religious rituals. Its presence and significance during festivals and religious ceremonies highlight its importance in local traditions and customs.

Diospyros melanoxylon (Kendu)

Religious significance: *Diospyros melanoxylon* role extends beyond its physical properties, deeply ingrained in the mythology, cultural practices, and daily lives of the Munda tribe and other communities in Odisha (epaper.prabhatkhabar.com. 2022). During the Sabitri Amawasya event, Kendu is used as bhogo (offerings), highlighting its importance in religious ceremonies and as a sacred element in worship practices.

Mythology and Cultural significance: *Diospyros melanoxylon*, known locally as Tendu, tiril, or kendu, holds significant cultural and mythological importance, particularly among the Munda tribe in Odisha. According to tribal lore, their ancestors sought refuge under the tiril tree during the historic Sengael Deaah, a catastrophic fire-raining event (epaper.prabhatkhabar.com. 2022).

Agricultural Protection: Due to its resistance to fire, tribes traditionally place a branch of the Tendu tree in their fields after planting rice. This practice is believed to protect crops from potential fire-related disasters, reflecting the tree's perceived protective qualities.

Evil Energy Protection: Tendu twigs are considered powerful defenders against evil energies. The bark of the tree is used as a tika (mark) on babies' foreheads to prevent impaired eyesight and safeguard against malevolent spirits.

Domestic Protection: Branches or parts of the Tendu tree are stored under sleeping areas within homes to ward off evil spirits, integrating the tree into daily protective rituals.

***Cocos nucifera* (Nariyal)**

Cocos nucifera is deeply woven into the religious and cultural fabric of Indian society. Its multifaceted use in religious ceremonies and cultural traditions underscores its significance as a sacred and integral part of Hindu life.

Religious Significance

Coconuts hold profound religious significance in Hindu traditions, particularly in Odisha and across India. In Odisha, Coconuts are offered to yagna flames at the end of ceremonies, with the charred Coconut consumed as Prasad for divine blessings. They symbolize prosperity and are placed on earthen pots at home entrances during auspicious events, representing Lord Ganesh in pujas. Coconuts are integral to Hindu rituals, often adorned with lucky symbols and cracked to mark new ventures for blessings. The Narali Purnima festival sees fishermen offering Coconuts to the sea to commence the fishing season, symbolizing hope for abundant catches (Viciziany et al 2024). In Palani, Coconuts are cracked for Murugan worship, symbolizing purification and prosperity (Dallapiccola 2014). Additionally, Coconuts are linked to Saraswati, the Goddess of Learning, and are central to the Khadichhuana ritual on Ganesh Chaturthi in Odisha, marking the start of children's education (Gupta 1991).

Cultural Significance

Coconuts hold deep Cultural significance: across India, woven into various rituals and traditions. Before long journeys, family members apply tilak to the traveler's forehead, offer a Coconut, and wish for good luck. In South Indian temples, priests accept Coconuts from devotees, which are then cracked and presented to the deity, later distributed as prasad. In Hindu marriages and other ceremonies, Coconuts are placed on the ceremony pandal as symbols of prosperity and divine blessings (Bramen 2009). Children participate in rituals by carrying painted Coconuts door to

door, singing Saraswati prayer songs, and collecting money to offer to their teachers as a mark of respect. The Coconut's three black spots symbolize Shiva (Trayambaka-Rudra), reinforcing its religious importance to the extent that Hindus avoid cutting down Coconut trees or using their wood for fuel. In Tamil Nadu, uprooting a Coconut seedling is considered as severe as harming one's own son, leading to the custom in Odisha of having the family's eldest member plant Coconuts, symbolizing continuity and respect for life (Ghose et al 2000).

***Ficus benghalensis* (Bara)**

Ficus benghalensis, or the Banyan tree, holds profound religious and Cultural significance: in India. It is revered in various Hindu rituals and festivals, symbolizing divine protection, fulfillment of wishes, and the connection between the physical and spiritual realms.

Religious Significance

Krishna's Resting Place: According to Hindu legend, the god Krishna is said to rest on the leaf of the Banyan tree, underscoring its divine association (Rahman 2016). In Odisha, the Bata Brukhya (Banyan tree) is worshipped during the Sabitri Amawasya Puja. Married women pray for their husbands' good health and prosperity by tying threads around the tree. **Jagannath Temple Tradition:** At the Jagannath Temple in Puri, Odisha, an ancient Bata Brukhya tree stands where people tie threads to fulfill their wishes. It is believed that tying a thread to the tree helps their dreams come true. The Banyan tree's unique characteristic, where branches grow down and roots grow up, is often linked to its mystical and spiritual significance (*Taipei Times* 2005).

Cultural Significance

National Symbol: *Ficus benghalensis*, also known as the Banyan fig or Indian Banyan, is the national tree of India, symbolizing longevity and enduring strength (Athreya 1997). **Symbol of Reality and Spirituality:** The Banyan tree symbolizes the connection between the physical and spiritual worlds, with its tangible form representing deeper spiritual truths. It illustrates the concept that the physical world is a mere shadow of a greater spiritual reality. **Symbol of Trimurti:** The Banyan tree is thought to represent the Trimurti of cosmic creation—Brahma, Vishnu, and Shiva. It symbolizes longevity, fertility, and resilience (Kerkar 2009). **Kalpavriksha:** In Hindu mythology, the Banyan tree is known as Kalpavriksha, the wish-fulfilling tree. It is said to grant wishes and material benefits. According to the myth, Kalpavriksha emerged during the Samudra Manthan (churning of the ocean), alongside Kamadhenu, the wish-fulfilling cow. Both were taken to heaven by Lord Indra and planted in Devaloka.

***Saraca asoca* (Aswastha)**

Saraca asoca, or the Ashoka tree, holds profound religious and mythological significance in Hinduism and Buddhism, symbolizing purity and divinity. Its presence in religious rituals, mythological tales, and temple architecture underscores its cultural importance across the Indian subcontinent. The flower of Ashoka tree is the state flower of Indian state of Odisha (www.mapsofindia.com).

Religious Significance

Durga Puja: In Odisha, the flowers of the Ashoka tree are offered to Goddess Durga during the annual Durga Puja festival. Devotees believe that offering these flowers will bring the goddess's blessings upon them. **Ramayana Connection:** In the epic Ramayana, Sita was kept in Ashoka Vatika by Ravana in Lanka. The Ashoka tree is thus deeply intertwined with the story of Sita's abduction and her subsequent rescue by Hanuman. **Sacredness in Hinduism:** The Ashoka tree is venerated across the Indian subcontinent, particularly in India, Nepal, and Sri Lanka. In Hinduism, it is considered sacred and is celebrated during Chaitra, the first month of the Hindu calendar. It is also linked to Kamadeva, the Hindu god of love, who includes the Ashoka blossom in his quiver as a symbol of seductive hypnosis (Cowen 1984). **Ashoka in Mythology:** The Ashoka tree is revered in Mahakavya and is notably mentioned in the Ramayana in connection with Ashoka Vatika, where Hanuman first met Sita (Shenoy 2011).

Cultural Significance

Yakshi Association: The Ashoka tree is closely associated with the mythological entities known as Yakshi. A common motif in Indian art is the sculpture of a Yakshini with her foot on the trunk and her hands embracing a limb of a flowering Ashoka tree. This imagery is prevalent at the entrances of Buddhist and Hindu temples. Some scholars suggest that the young girl at the base of the tree represents an ancient tree deity connected with fertility (Zimmer 1946). **Salabhanjika Motif:** The depiction of a Yakshi under the Ashoka tree became a standard decorative element in Hindu Indian sculpture and was integrated into Indian temple architecture as Salabhanjika (Schumann 2005). **Buddhist Significance:** The Ashoka tree is also significant in Buddhism. It is said that Gautama Buddha was born under an Ashoka tree, which is why it is often planted in Buddhist monasteries.

Conservation Challenges

Conservation of cultural and religious plants in Odisha faces several challenges. Rapid urbanization and industrialization are leading to habitat destruction, reducing the areas where these sacred plants naturally thrive. Additionally, climate change is

altering weather patterns, affecting the growth and survival of these species. Traditional knowledge about the care and significance of these plants is gradually being lost as younger generations migrate to urban centre and adopt modern lifestyles, leading to a decline in community-based conservation efforts. Furthermore, there is often a lack of comprehensive documentation and scientific research on these plants, making it difficult to develop effective conservation strategies. Lastly, economic pressures can lead to the exploitation of these plants for commercial purposes, further endangering their existence. Addressing these challenges requires a multifaceted approach, integrating community involvement, education, and sustainable development practices.

Future Prospects

The future prospects of cultural and religious plant cultivation in Odisha appear promising, driven by the state's rich heritage and increasing recognition of traditional practices. With the rise of ecotourism and the growing interest in Ayurvedic medicine, plants like the Tulsi, Bael, and Sandalwood, which hold significant cultural and religious value, are seeing renewed interest. The state's favorable climate and diverse agro-ecological zones further bolster this potential. Government initiatives to promote herbal and medicinal plant farming, coupled with research and development efforts from local universities, are expected to enhance both the quality and quantity of these valuable plants. This growth not only supports biodiversity and environmental sustainability but also provides economic benefits to local communities through expanded agricultural opportunities and the potential for niche markets

Conclusion

In conclusion, the exploration of the religious and cultural importance of plants in Odisha reveals a rich tapestry of beliefs, rituals, and practices deeply intertwined with nature. From ancient traditions to modern-day ceremonies, plants play a central role in the spiritual and cultural landscape of the region. The diverse flora of Odisha serves as symbols of devotion, prosperity, protection, and fertility, fostering a deep connection between people and their natural environment. As we continue to delve into the mysteries of divine botany, we gain a deeper appreciation for the profound significance of plants in shaping the spiritual identity and cultural heritage of Odisha.

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