Advanced International Journal for Research (AIJFR)
E-ISSN: 3048-7641 ● Website: www.aijfr.com ● Email: editor@aijfr.com

# Cultural Significance of Medicinal Plants Used in Worship Traditions of Maharashtra, India

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**Abstract**

Medicinal plants occupy a unique position in Indian culture where religious beliefs, healthcare practices, and ecological conservation are intricately linked. In Maharashtra, various plant species are traditionally used in worship and rituals while at the same time serving important medicinal roles. The present study documents medicinal plants used in religious worship and rituals in Maharashtra and evaluates their ethnomedicinal significance alongside reported pharmacological activities. Secondary data were collected through extensive review of classical Ayurvedic texts, ethnobotanical literature, and peer-reviewed scientific studies. The documented plants include *Aegle marmelos*, *Ocimum tenuiflorum*, *Cynodon dactylon*, *Azadirachta indica*, *Curcuma longa*, *Ficus* spp., and several others widely used in Shaiva, Vaishnava, Shakta, and folk traditions. Many of these plants exhibit pharmacological properties such as anti-inflammatory, antimicrobial, antidiabetic, hepatoprotective, antioxidant, and immunomodulatory activities, validating their traditional ritual use. The study highlights how religious practices have historically contributed to the conservation and sustainable utilization of medicinal plants. Documentation of such sacred ethnobotanical knowledge is essential for preserving cultural heritage, promoting biodiversity conservation, and supporting future pharmacological research.

**Keywords:** Ethnobotany, sacred plants, rituals, medicinal plants, Maharashtra, traditional knowledge

## 1. Introduction

Plants have played a central role in human civilization as sources of food, medicine, shelter, and spiritual symbolism. In traditional societies, particularly in India, plants are not merely biological entities but sacred elements deeply embedded in religious beliefs and cultural practices (Jain, 1991; Cotton, 1996). Ethno-botanical studies documents this intimate relationship between humans and plants, emphasizing how cultural perceptions influence plant use, conservation, and knowledge transmission.

India represents one of the world's richest reservoirs of ethnobotanical knowledge due to its vast biodiversity and long established traditional medical systems such as Ayurveda, Siddha, and Unani (WHO, 2002). In Ayurveda, plants are often described not only for their therapeutic value but also for their ritual purity and divine associations (Sharma, 2006). As a result, many medicinal plants are simultaneously revered as sacred and used extensively in worship and rituals.

In Maharashtra, religious traditions involving household worship, temple rituals, village deity worship, and seasonal festivals extensively utilize plant resources. Sacred plants such as *Aegle marmelos*,

*Ocimum tenuiflorum*, *Cynodon dactylon*, *Ficus religiosa*, and *Azadirachta indica* are deeply associated with specific deities and rituals (Nadkarni, 2002; Deshmukh & Kharat, 2018). These associations have played a crucial role in the protection and conservation of these species over generations (Gadgil & Vartak, 1976).

**Materials and Methods**

The present study is based on secondary data collected through offline and online research. Information was compiled from Ayurvedic texts, ethnobotanical literature, and published research articles. Standard reference works such as those by Kirtikar and Basu (1999), Nadkarni (2002), Warrier (1995), Jain (1991), and Sharma (2006) were consulted for traditional uses. Pharmacological data were collected from peer-reviewed journals and review articles. The collected information was verified, organized, and presented under headings such as ritual use, traditional medicinal use, and pharmacological findings.

**Results and Discussion**

The study documents various plant species used in worship and rituals in Maharashtra. These plants are associated with specific deities, festivals, and ceremonial practices. Examples include *Aegle marmelos* offered to Lord Shiva during Mahashivratri, *Cynodon dactylon* offered to Lord Ganesha, *Ocimum tenuiflorum* worshipped daily in households, and *Azadirachta indica* used in purification and epidemic-related rituals.

Traditional medicinal uses of these plants include treatment of gastrointestinal disorders, skin diseases, respiratory ailments, diabetes, fever, inflammation, and wounds (Jain, 1991; Nadkarni, 2002; Warrier, 1995). Pharmacological studies confirm activities such as antidiarrheal, antimicrobial, antioxidant, hepatoprotective, antidiabetic, anti-inflammatory, and immunomodulatory effects for many of these species (Dhuley, 2003; Alzohairy, 2016; Baliga et al., 2011; Biswas et al., 2017).

**Table 1: Details of plant used in Worship and Rituals:**

| Sr No | Name of the Plant | Use in Worship / Deity | References (Worship / Deity) | Use in Rituals | References (Rituals) |
|---|---|---|---|---|---|
| 1. | *Abrus precatorius* L. | Sacred climber; seeds used as japamala; associated with Vaishnava and Shaiva traditions, symbolising devotion and protection. | Kadam (2022); Bhosale & Jagtap (2020) | Used in garlands, rosaries, folk protective rites, weddings and special poojas. | Sharma & Patil (2015); More & Pawar (2020) |
| 2. | *Aegle marmelos* (L.) Correa | Highly sacred to Lord Shiva; trifoliate leaves symbolize Brahma–Vishnu– | Kulkarni et al. (2014); Deshmukh & Kharat | Mahashivratri, Shravan rituals, Rudrabhishek, Gauri-Ganpati, | Shinde (2019); Jagtap (2017); Bhosale & |

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| | | Mahesh; indispensable in Shaiva worship. | (2018); Patil (2016) | havans; fruits used in domestic rites. | Jagtap (2020) |
| 3. | *Alstonia scholaris* (L.) R.Br. | Sacred tree planted near temples; associated with Shaiva and tantric traditions for spiritual protection. | Kadam et al. (2013); Sharma & Patil (2015) | Leaves and bark used in ancestral rites, vastu rituals, folk purification ceremonies. | Bhosale & Jagtap (2020); Deshmukh & Joshi (2017) |
| 4. | *Azadirachta indica* A. Juss. | Sacred purifier tree; symbol of health, protection and spiritual cleansing. | Kulkarni & Gaikwad (2016) | Gudhi Padwa, Navratri, Mari-Aai worship, Graha-shanti, havans, epidemic rituals. | Deshpande (2018); Pawar & Kshirsagar (2019); Kadam & Salunkhe (2020) |
| 5. | *Calotropis procera* (Aiton) W.T.Aiton | Strongly associated with Lord Shiva; symbol of resilience and spiritual power. | Deshmukh & Kharat (2018); Kulkarni & Bhise (2017) | Shravan, Mahashivratri, folk deity worship, village boundary rituals. | Bhave & Deshmukh (2018); Jagtap & Bhosale (2015) |
| 6. | *Chrysanthemum indicum* L. | Revered flower offered to Lord Ganesha, Lakshmi and regional deities; symbol of purity. | Deshmukh & Joshi (2017); Bhosale & Jagtap (2020) | Ganesh Chaturthi, Navratri, Diwali; folk protective rites and altar decoration. | Sharma & Patil (2015) |
| 7. | *Cocos nucifera* L. | Supreme sacred offering (Shreefal); symbol of ego-sacrifice, prosperity and divine presence. | Patil & Kulkarni (2015); Pawar (2017) | Almost all rituals: marriage, grihapravesh, Satyanarayan pooja, Narali Pournima. | Shetye (2018); Borgave & More (2020); Gadkari (2022) |
| 8. | *Coriandrum sativum* L. | Aromatic sacred herb symbolising purity and prosperity in domestic worship. | Bhosale & Jagtap (2020) | Kalash rituals, weddings, torans, folk protection ceremonies. | Deshmukh & Joshi (2017); Sharma & Patil (2015) |
| 9. | Costus speciosus (Koen) Sm. | Sacred to Vishnu, Krishna and Lakshmi; valued for fragrance | Jadhav & Pawar (2018); More & | Janmashtami, Gauri Puja, folk ancestral rituals, temple | Kadam & Patil (2016); Bhosale & |

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| | | and ritual purity. | Kulkarni (2020) | garlands. | Jagtap (2020) |
| 10. | *Curcuma longa* L. | Sacred symbol of purity, fertility and auspiciousness; linked with solar energy. | Patil & Kulkarni (2016); Kulkarni & Bhise (2017) | Haldi ceremony, Gudi Padwa, Ganesh Chaturthi, grihapravesh, ancestral rites. | Shinde & Pawar (2018); Kadam & Sawant (2018) |
| 11. | *Cynodon dactylon* (L.) Pers. | Highly sacred grass offered to Lord Ganesha; symbol of longevity and prana. | Shinde & Kulkarni (2015); Jagtap (2019) | Ganesh Chaturthi, vastu-shanti, pitru-tarpan, homa, folk healing rites. | Patil & Holkar (2016); More & Sawant (2017) |
| 12. | *Datura metel* L. | Sacred and powerful plant of Lord Shiva; represents transformative divine energy. | Deshmukh & Kharat (2018); Kulkarni & Bhise (2017) | Mahashivratri, tantric rites, folk exorcism, ancestral worship. | Jagtap & Bhosale (2015); More & Pawar (2020) |
| 13. | *Ficus benghalensis* L. | Sacred banyan symbolising longevity and marital fidelity; associated with Shiva and Parvati. | Kulkarni & Patwardhan (2016) | Vat Savitri, Vat Pournima, temple and household protection rituals. | Deshpande (2017); Pawar & Chavan (2020) |
| 14. | *Ficus racemosa* L. | Sacred Umbar linked to Dattatreya and Shiva; symbol of abundance. | Kulkarni & Patwardhan (2016) | Ancestral worship, fertility rites, seasonal agricultural ceremonies. | Shinde & Ahire (2018); Jagtap (2021) |
| 15. | *Ficus religiosa* L. | One of the most sacred trees; abode of Vishnu, Shiva and Lakshmi. | Patil & Salunke (2015) | Vat-Savitri, Somvati Amavasya, pitru-tarpan, meditation rituals. | Jadhav & Pawar (2018); Kale & Kulkarni (2014) |
| 16. | *Lagerstroemia microcarpa* C.B.Clarke | Sacred tree in temple groves; symbol of purity and protection. | Kadam et al. (2013) | Local deity worship, boundary rituals, folk healing ceremonies. | Deshmukh & Joshi (2017); Sharma & Patil (2015) |
| 17. | *Musa* | Sacred symbol of | Patil & | Marriage rituals, | Shinde & |

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| | *paradisiaca* L. | fertility and prosperity. | Kulkarni (2016) | Kalash decoration, Satyanarayan pooja, festivals. | Pawar (2018); Kadam & Sawant (2018) |
| 18. | *Nelumbo nucifera* Gaertn. | Supreme sacred flower of Goddess Lakshmi and Lord Vishnu; symbol of enlightenment. | Kulkarni (2017); Jadhav (2018) | Lakshmi Poojan, Satyanarayan pooja, Navratri, meditation rituals. | Deshmukh & More (2020); Sawant & Pawar (2021) |
| 19. | *Neolamarckia cadamba* (Roxb.) Bosser | Sacred *Kadamba* tree associated with Lord Krishna; revered in Vaishnava tradition as the site of *Rasa Leela* and worshipped for prosperity | Kulkarni & Bhise, 2017; Patil & Kulkarni, 2016 | Used in Krishna Janmashtami, temple rituals and folk deity worship; flowers and branches used in ceremonial decoration | Deshmukh & Joshi, 2017; Bhosale & Jagtap, 2020 |
| 20. | *Ocimum tenuiflorum* L. | Tulsi worshipped as goddess; Vishnu consort. | Patil & Kulkarni, 2015 | Tulsi Vivah, daily household worship. | Pawar & Kshirsagar, 2019 |
| 21. | *Pandanus odorifer* (Forssk.) Kuntze | Sacred fragrant leaves in deity worship. | Bhosale & Jagtap, 2020 | Temple decoration and folk rituals. | Sharma & Patil, 2015 |
| 22. | *Phyllanthus emblica* L. | Sacred to Vishnu; purity symbol. | Kulkarni & Bhise, 2017 | Kartik Purnima and fasting rituals. | Deshmukh & Joshi, 2017 |
| 23. | *Piper betle* L. | Sacred auspicious leaf. | Sharma & Patil, 2015 | Marriage and hospitality rituals. | More & Pawar, 2020 |
| 24. | *Prosopis cineraria* (L.) Druce | Sacred desert tree linked to folk deities. | Kadam et al., 2013 | Dussehra and protection rituals. | Deshmukh & Joshi, 2017 |
| 25. | *Santalum album* L. | Sacred sandalwood for deity adornment. | Kulkarni & Bhise, 2017 | Temple, funeral and meditation rituals. | Jadhav & Pawar, 2018 |
| 26. | *Saraca asoca* (Roxb.) De Wilde | Sacred fertility tree of Goddess Parvati. | Kulkarni, 2017 | Navratri and fertility rites. | Deshpande, 2018 |

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| 27. | *Tagetes erecta* L. | Sacred marigold of auspiciousness. | Bhosale & Jagtap, 2020 | Festivals, weddings and temple decoration. | Sharma & Patil, 2015 |

The information compiled in Table -1, provides a comprehensive insight into the close relationship between plant diversity and religious traditions in Maharashtra. The use of plants in worship and rituals is not merely symbolic but reflects deeply rooted ethnobotanical knowledge that has evolved through centuries of cultural practice. The diversity of species recorded, ranging from grasses and herbs to large perennial trees, indicates that sacred plant use encompasses multiple ecological niches and life forms, reinforcing the idea that religion acts as a unifying framework for biodiversity interaction and conservation.

A distinct pattern evident from the table is the deity specific association of certain plants. Plants such as *Aegle marmelos*, *Calotropis procera* and *Datura metel* are consistently associated with Lord Shiva, reflecting Shaiva traditions where austerity, renunciation and powerful natural elements are symbolically represented through hardy or medicinal plants (Kulkarni et al., 2014; Deshmukh & Kharat, 2018). The trifoliate leaves of *Aegle marmelos* symbolising the Hindu trinity (Brahma-Vishnu-Mahesh) further strengthen its indispensable role in Shaiva worship, especially during ‘Mahashivratri’ and the month of ‘Shravan’ (Patil, 2016). Similarly, *Cynodon dactylon* occupies a unique position in ‘Ganapati’ traditions, where its offering to Lord Ganesha is believed to ensure longevity and removal of obstacles (Shinde & Kulkarni, 2015; Jagtap, 2019).

Several plant species exhibit pan-religious and pan-cultural sacredness. *Ocimum tenuiflorum*, *Ficus religiosa* and *Nelumbo nucifera* are revered across Vaishnava, Shaiva and Shakta traditions, indicating their universal spiritual acceptance (Patil & Kulkarni, 2015; Kulkarni, 2017). Daily household worship of Tulsi and the reverence of ‘Peepal’ and Lotus in temples and domestic rituals demonstrate how sacred plants bridge the divide between public religious spaces and private devotional practices.

Also emphasized, the role of large trees as sacred landscape elements. Species such as *Ficus benghalensis*, *Ficus racemosa*, *Neolamarckia cadamba* and *Saraca asoca* are not only worshipped individually but also protected as living deities within temple premises, village boundaries and sacred groves (Kulkarni & Patwardhan, 2016; Kadam et al., 2013). Rituals like ‘Vat-Savitri’, ‘Janmashtami’ and ‘Navratri’ reinforce the ecological importance of these trees by promoting their preservation and discouraging indiscriminate felling. This faith based conservation mechanism has significantly contributed to the survival of old growth trees in rural and semi-urban landscapes.

Life-cycle rituals and domestic ceremonies prominently feature plants such as *Curcuma longa*, *Cocos nucifera*, *Musa paradisiaca* and *Piper betle*. Their repeated use in marriage ceremonies, housewarming rituals and auspicious occasions highlights their symbolic association with fertility, prosperity, purity and continuity of family lineage (Patil & Kulkarni, 2016; Shetye, 2018; More & Pawar, 2020). The ritual importance of these plants has ensured their sustained cultivation and availability, thereby supporting agrobiodiversity and traditional farming practices.

Flowers and aromatic plants form another important category within ritual plant use. Species like *Tagetes erecta*, *Chrysanthemum indicum*, *Pandanus odorifer* and *Santalum album* are valued for their fragrance, colour and aesthetic appeal, which enhance the sensory and devotional experience of worship (Sharma & Patil, 2015; Bhosale & Jagtap, 2020). Their extensive use during festivals such as 'Ganesh-Chaturthi', 'Navratri' and Diwali also provides seasonal livelihood opportunities for local cultivators and flower vendors.

Overall, it reveals that the use of plants in worship and rituals serves multiple interconnected functions, religious symbolism, cultural identity, ecological conservation and socio-economic support. The persistence of these practices demonstrates how traditional belief systems act as custodians of ethnobotanical knowledge, ensuring sustainable utilization and protection of plant resources across generations (Deshmukh & Joshi, 2017; Bhosale & Jagtap, 2020). Such documentation is crucial not only for academic understanding but also for framing conservation strategies that integrate cultural values with biodiversity management.

**Table- 2: Traditional Uses and Pharmacological Findings of Plants.**

| Sr No | Plant Name | Traditional uses | References | Pharmacological findings | References |
|---|---|---|---|---|---|
| **1.** | *Abrus precatorius* L. | Cough, cold (leaf); skin diseases (seed); joint pain (root); wounds (leaf); bronchitis (root) | Nadkarni, 2002; Kirtikar & Basu, 1999; Warrier, 1995; Jain, 1991 | Hepatoprotective; anti-inflammatory; antimicrobial; immunomodulatory; antifertility | Garaniya et al., 2014; Teja et al., 2019; Nawale et al., 2021; Modi et al., 2021 |
| **2.** | *Aegle marmelos* (L.) Correa | Diarrhoea, dysentery (fruit); diabetes (leaf); ulcers (root bark); jaundice (leaf) | Sharma, 2006; Nadkarni, 2002; Warrier, 1995; Jain, 1991 | Antidiarrhoeal; anti-ulcer; antidiabetic; hepatoprotective; antioxidant | Dhuley, 2003; Baliga et al., 2011; Singh et al., 2012 |
| **3.** | *Alstonia scholaris* (L.) R.Br. | Malaria (bark); fever (leaf); asthma, respiratory disorders (bark) | Kirtikar & Basu, 1999; Sharma, 2006; Warrier, 1995; Jain, 1991 | Antimalarial; antipyretic; anti-inflammatory; immunomodulatory | Kapoor & Singh, 2009; Garg et al., 2011; Kaur et al., 2015 |

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| **4.** | *Azadirachta indica* A.Juss. | Skin infections (leaf); piles (bark); diabetes (leaf); liver complaints (bark) | Nadkarni, 2002; Sharma, 2006; Warrier, 1995; Jain, 1991 | Antimicrobial; antidiabetic; antioxidant; hepatoprotective; immunomodulatory | Alzohairy, 2016; Baby et al., 2022 |
| **5.** | *Calotropis procera* (Aiton) W.T.Aiton | Wound healing (latex); digestive disorders (root bark); asthma (leaf); fever (root) | Kirtikar & Basu, 1999; Warrier, 1995; Nadkarni, 2002; Jain, 1991 | Anti-inflammatory; analgesic; antimicrobial; wound-healing | Upadhyay, 2014; Wadhwani, 2021 |
| **6.** | *Chrysanthemum indicum* L. | Fever (flower); headache (leaf); skin infections (inflorescence) | Sharma, 2006; Warrier, 1995; Nadkarni, 2002 | Anti-inflammatory; antipyretic; antioxidant; antimicrobial | Liang et al., 2018; Bailly, 2021 |
| **7.** | *Cocos nucifera* L. | Urinary disorders (water); diarrhoea (kernel); skin ailments (oil) | Sharma, 2006; Nadkarni, 2002; Jain, 1991 | Antioxidant; antimicrobial; cardioprotective | DebMandal, 2011; Ramesh et al., 2021 |
| **8.** | *Cocos nucifera* L. | Urinary disorders (water); skin irritation (oil); diarrhoea (kernel); dysentery (root) | Sharma, 2006; Warrier, 1995; Nadkarni, 2002; Jain, 1991 | Antimicrobial; antioxidant; cardioprotective; electrolyte balance | DebMandal, 2011; Ramesh et al., 2021 |
| **9.** | *Coriandrum sativum* L. | Digestive disorders (seed); headache (leaf); fever (seed decoction) | Sharma, 2006; Warrier, 1995; Nadkarni, 2002 | Digestive stimulant; antioxidant; antidiabetic; antimicrobial | Al-Mofleh et al., 2006; Pathak et al., 2011 |

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| **10.** | *Costus speciosus* (Koen) Sm. | Diabetes (rhizome); fever (leaf); skin diseases (rhizome); jaundice | Sharma, 2006; Warrier, 1995; Kirtikar & Basu, 1999; Jain, 1991 | Antidiabetic; anti-inflammatory; antioxidant; hepatoprotective | Sabitha Rani et al., 2012; El-Far, 2018 |
| **11.** | *Curcuma longa* L. | Inflammation (rhizome); skin diseases (paste); dyspepsia | Sharma, 2006; Nadkarni, 2002; Warrier, 1995; Jain, 1991 | Anti-inflammatory; antioxidant; antimicrobial | Menon, 2007; Fuloria et al., 2022 |
| **12.** | *Cynodon dactylon* (L.) Pers. | Dysentery, diarrhoea (whole plant); wounds; urinary disorders | Sharma, 2006; Nadkarni, 2002; Jain, 1991 | Wound-healing; haemostatic; antidiabetic; diuretic | Biswas et al., 2017; Rao et al., 2013 |
| **13.** | *Datura metel* L. | Asthma (leaf, seed); cough; rheumatism (leaf); skin diseases (fruit) | Nadkarni, 2002; Warrier, 1995; Sharma, 2006; Jain, 1991 | Analgesic; anti-inflammatory; antispasmodic; antimicrobial | Wannang et al., 2009; Sharma, 2021 |
| **14.** | *Ficus benghalensis* L. | Diabetes; diarrhoea; wounds (bark, latex) | Nadkarni, 2002; Jain, 1991 | Antidiabetic; wound-healing; antioxidant | Singh et al., 2018; Murugesu, 2021 |
| **15.** | *Ficus racemosa* L. | Diarrhoea (bark); urinary disorders (fruit); skin diseases (latex); diabetes (fruit) | Warrier, 1995; Sharma, 2006; Kirtikar & Basu, 1999; Jain, 1991 | Anti-inflammatory; antioxidant; antidiabetic; antimicrobial; wound-healing; antiulcer | Mazumder et al., 2018; Singh et al., 2023; Murugesu, 2021 |
| **16.** | *Ficus religiosa* | Asthma (bark); constipation | Nadkarni, 2002; | Antidiabetic; anti-ulcer; antimicrobial; | Murugesu, 2021; Singh et al., |

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| | L. | (fruit); skin diseases (latex); ulcers (bark) | Warrier, 1995; Jain, 1991 | wound-healing; immunomodulatory | 2018; Dash & Sahu, 2019 |
| **17.** | *Lgerstroemia microcarpa* Wight | Diabetes (bark); fever (bark); digestive disorders (bark); wounds and skin diseases (bark) | Nadkarni, 2002; Jain, 1991; Sharma, 2006 | Antidiabetic; antioxidant; anti-inflammatory; antimicrobial | Sharma et al., 2012; Singh et al., 2016 |
| **18.** | *Musa paradisiaca* L. | Diarrhoea; ulcers; wound healing; cooling agent | Nadkarni, 2002; Jain, 1991 | Antioxidant; antimicrobial; anti-ulcer; cytoprotective | PNR Journal, 2023; Ariffin et al., 2021 |
| **19.** | *Nelumbo nucifera* Gaertn. | Diarrhoea; cardiac tonic; skin disorders; cooling agent | Nadkarni, 2002; Sharma, 2006; Jain, 1991 | Antioxidant; cardioprotective; anti-inflammatory; anticancer (preclinical) | Bishayee et al., 2022; Biswas & Mohanty, 2021 |
| **20.** | *Neolamarckia cadamba* (Roxb.) Bosser | Fever (bark); diarrhoea and dysentery (bark); skin diseases (leaf); inflammation and wounds (bark); general tonic | Kirtikar & Basu, 1999; Nadkarni, 2002; Sharma, 2006; Jain, 1991 | Anti-inflammatory; antioxidant; antimicrobial; antidiabetic; hepatoprotective | Mondal et al., 2009; Chandrashekar et al., 2013; Sah |
| **21.** | *Ocimum tenuiflorum* L. | Cough, cold, asthma (leaf); fever; skin diseases; digestive disorders | Nadkarni, 2002; Sharma, 2006; Jain, 1991 | Anti-inflammatory; antimicrobial; adaptogenic; immunomodulatory; antidiabetic | Singh, 2018; Khurana, 2020; Sahu, 2025 |
| **22.** | *Pandanus odorifer* (Forssk.) Kuntze | Headache (flower); rheumatism (root); skin diseases (leaf); earache (leaf juice); cooling agent | Nadkarni, 2002; Kirtikar & Basu, 1999; Jain, 1991 | Anti-inflammatory; analgesic; antioxidant; antimicrobial | Kumar et al., 2014; Rahman et |

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| **23.** | *Phyllanthus emblica* L. | Anaemia; diabetes; digestive disorders; general tonic (fruit) | Nadkarni, 2002; Jain, 1991 | Antioxidant; hepatoprotective; anti-inflammatory; cardioprotective; neuroprotective | Bhattacharya et al., 2000; Rajalakshmi et al., 2019; Kapoor et al., 2019 |
| **24.** | *Piper betle* L. | Wound healing; digestive stimulant; mouth infections | Nadkarni, 2002; Jain, 1991 | Antioxidant; antimicrobial; anti-inflammatory | Venugopalan, 2015; Reddy et al., 2021 |
| **25.** | *Santalum album* L. | Skin disorders; burning sensation; cooling agent; fragrance | Nadkarni, 2002; Jain, 1991 | Anti-inflammatory; antimicrobial; antioxidant; anticancer (preclinical) | Saneja et al., 2009; Santha et al., 2015 |
| **26.** | *Saraca asoca* (Roxb.) Willd. | Menstrual disorders; uterine tonic; dysmenorrhoea (bark) | Sharma, 2006; Jain, 1991; Nadkarni, 2002 | Uterotonic; anti-inflammatory; antioxidant; cardioprotective | Rathod & Ghante, 2021; Prasad et al., 2024 |
| **27.** | *Tagetes erecta* L. | Skin infections; eye disorders; wound cleansing | Jain, 1991; Sharma, 2006 | Antimicrobial; antioxidant; anticancer (in-vitro) | Vedam et al., 2019; Chaudhari & Muthal, 2023 |

The data presented in Table-2, provide comprehensive evidence that traditional medicinal practices documented in classical Ayurvedic, ethnobotanical and other literature are strongly supported by modern pharmacological investigations. The convergence of indigenous knowledge and experimental validation reflects the empirical wisdom accumulated over centuries and emphasizes the scientific relevance of ethnomedicine

A prominent trend emerging from the table is the extensive use of medicinal plants for gastrointestinal disorders, including diarrhoea, dysentery, ulcers and digestive complaints. Plants such as *Aegle marmelos*, *Ficus racemosa*, *Musa paradisiaca* and *Nelumbo nucifera* have long been prescribed in traditional systems for bowel regulation and intestinal health (Nadkarni, 2002; Sharma, 2006; Jain, 1991). Pharmacological studies reporting antidiarrhoeal, anti-ulcer, antioxidant and cytoprotective activities provide strong experimental backing to these traditional claims (Dhuley, 2003; Baliga et al., 2011; Mazumder et al., 2018; Ariffin et al., 2021). This alignment indicates that traditional healers were able to identify bioactive plants effective in managing gastrointestinal pathologies.

Another major category of use involves inflammatory conditions, wounds and skin diseases. Species such as *Curcuma longa*, *Calotropis procera*, *Cynodon dactylon*, *Abrus precatorius* and *Tagetes erecta* are traditionally used for treating inflammation, cuts, burns and skin infections (Kirtikar & Basu, 1999; Warrier, 1995; Nadkarni, 2002). Contemporary research demonstrates that these plants possess anti-inflammatory, antimicrobial, analgesic and wound-healing properties, thereby validating their topical and systemic applications (Menon, 2007; Upadhyay, 2014; Biswas et al., 2017; Vedam et al., 2019). Such findings underline the relevance of traditional remedies in primary healthcare, especially in rural and tribal communities.

Plants employed for respiratory disorders, including asthma, cough, bronchitis and fever, form another significant group. *Alstonia scholaris*, *Abrus precatorius*, *Datura metel* and *Ocimum tenuiflorum* are frequently cited in classical texts for respiratory relief (Nadkarni, 2002; Warrier, 1995; Jain, 1991). Modern pharmacological studies confirming antipyretic, antispasmodic, immunomodulatory and antimicrobial activities support their continued use in managing respiratory ailments (Kapoor & Singh, 2009; Wannang et al., 2009; Singh, 2018). This correlation further strengthens the credibility of ethnomedicinal prescriptions.

Also highlighted, the importance of medicinal plants in the management of metabolic disorders, particularly diabetes. Plants such as *Azadirachta indica*, *Costus speciosus*, *Ficus benghalensis*, *Lagerstroemia microcarpa* and *Neolamarckia cadamba* are traditionally used to regulate blood sugar levels (Sharma, 2006; Nadkarni, 2002). Experimental studies reporting antidiabetic, antioxidant and hepatoprotective activities provide mechanistic explanations for their traditional efficacy (Sabitha Rani et al., 2012; Sharma et al., 2012; Mondal et al., 2009). These findings indicate the potential of traditional medicinal plants as complementary or alternative therapeutic agents for chronic metabolic diseases.

Several plants documented in the table are valued as general tonics and rejuvenators, reflecting the holistic approach of traditional medicine. *Phyllanthus emblica*, *Nelumbo nucifera* and *Neolamarckia cadamba* are traditionally prescribed to improve vitality, immunity and overall health (Nadkarni, 2002; Jain, 1991). Modern studies demonstrating antioxidant, cardioprotective, neuroprotective and immunomodulatory activities substantiate these traditional claims (Bhattacharya et al., 2000; Bishayee et al., 2022; Chandrashekar et al., 2013).

In addition, plants like *Saraca asoca* and *Santalum album* highlight the specialized use of medicinal flora in reproductive and systemic health. *Saraca asoca* is traditionally revered as a uterine tonic for menstrual disorders (Sharma, 2006; Jain, 1991), while pharmacological studies report uterotonic and anti-inflammatory properties (Rathod & Ghante, 2021). Similarly, *Santalum album*, valued for its cooling and soothing effects, exhibits antimicrobial and antioxidant activities (Saneja et al., 2009), validating its traditional therapeutic role.

Overall, it clearly establishes that traditional medicinal knowledge is deeply rooted in practical efficacy rather than mere belief. The strong correspondence between ethnomedicinal uses and pharmacological findings highlights the importance of documenting, conserving and scientifically evaluating medicinal plants. Such integrated understanding not only preserves traditional heritage but also opens avenues for drug discovery and evidence-based herbal medicine.

The findings reveal a strong correlation between ritual use and medicinal value of sacred plants in Maharashtra. Religious reverence has historically ensured the protection of medicinally important species, particularly trees such as *Ficus religiosa*, *Ficus benghalensis*, *Aegle marmelos*, and *Azadirachta indica* (Gadgil & Vartak, 1976). Ritual practices such as offering leaves, flowers, fruits, or symbolic use of plant parts minimize destructive harvesting and promote sustainable use.

Many ritual plants possess scientifically validated pharmacological properties. For instance, turmeric (*Curcuma longa*) used in marriage and purification rituals exhibits strong anti-inflammatory and antimicrobial activity (Menon, 2007; Fuloria et al., 2022). Neem (*Azadirachta indica*), used in purification rituals, shows broad-spectrum antimicrobial and immunomodulatory effects (Alzohairy, 2016). Such examples indicate that ritual practices are deeply rooted in empirical knowledge accumulated over generations.

## Conclusion

The present study demonstrates that medicinal plants used in worship and rituals in Maharashtra play a vital role in cultural identity, traditional healthcare, and biodiversity conservation. The overlap between ritual significance and medicinal value highlights the holistic worldview of traditional Indian societies. Documentation of sacred ethnobotanical knowledge is essential for preserving intangible cultural heritage, promoting sustainable utilization of plant resources, and supporting future pharmacological research. Integrating traditional knowledge with modern scientific validation can contribute significantly to conservation strategies and integrative healthcare systems.

## Acknowledgement

Authors are thankful to the Principal of college for facilities and constant encouragement.

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