



Navagraha Sacred Plants: Bridging Traditional Beliefs and Modern Pharmacology

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Abstract: The Navagraha vatika, or Nine-Planet Garden, is a sacred botanical arrangement rooted in Vedic astrology, wherein nine specific plants are each associated with one of the nine celestial bodies that are believed to influence human destiny. The Navagraha vatika is characterized by symmetrical and geometric forms, reflecting the formalism inherent in its astrological foundations. This ancient concept, deeply embedded in Hindu religious practices, combines cosmology, spirituality, and herbal science. Each plant in the Navagraha vatika not only symbolizes a planetary deity but is also revered for its distinct medicinal properties in Ayurveda and traditional Indian medicine. This paper explores the mythological and astrological significance of each Navagraha plant, along with a detailed review of their ethnomedicinal uses, phytochemical constituents, and therapeutic applications. By bridging traditional beliefs with contemporary phyto-therapeutic insights, this study highlights the holistic wisdom embedded in the Navagraha vatika tradition and advocates for its relevance in modern ethnobotany and integrative health systems. Planting and revering plants as indicated by one's astrological chart is a significant strategy to ensure and conserve biodiversity, eventually benefiting individuals. The human relationship with flora might be useful in conserving plant species for their treasured characteristics.

Key words: Navagraha vatika, Indian custom and traditions, Modern Pharmacology.

1. INTRODUCTION

India's ancient knowledge systems have long reflected a profound harmony between the cosmos, nature, and human health. Among these is the concept of the Navagraha—the nine celestial bodies in Vedic astrology believed to exert influence over various aspects of human life, including health, emotions, destiny, and behaviour. To honour and appease these planetary deities, specific plants have been traditionally associated with each *graha* (planet), forming what is known as the Navagraha vatika or Nine-Planet Sacred Garden. We can say that in Indian culture, the Navagraha are the nine celestial bodies believed to influence human life. Each of these planets is associated with a specific plant or tree, which is considered sacred and is believed to have both spiritual and medicinal benefits.

The Navagraha vatika is more than a symbolic arrangement; it represents a holistic approach to spiritual and physical well-being. Each of the nine plants corresponds to a planet and is chosen not only for its astrological significance but also for its healing properties as described in Ayurveda and folk medicine. For instance, the Peepal tree (*Ficus religiosa*) associated with Jupiter (Guru) is revered for its spiritual importance and known medicinal benefits in treating respiratory and metabolic disorders. Likewise, *Calotropis gigantea*, sacred to the Sun (Surya), holds potent anti-inflammatory and wound-healing qualities.

In modern times, as the search for alternative and integrative approaches to health intensifies, revisiting such traditional ecological and astrological systems offers valuable insights. This paper seeks to explore the spiritual symbolism, ethnobotanical relevance, and therapeutic potential of the nine sacred plants of the Navagraha vatika. By blending scriptural references, traditional practices, and scientific evidence, the study aims to highlight the enduring relevance of this ancient garden tradition in contemporary health, wellness, and ecological conservation.

1.2 Historical and Cultural background of Navagraha worship

The concept of the Navagraha (the Nine Planets) has deep roots in ancient Indian cosmology, astrology, and religious practices. These celestial bodies, which include the Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, as well as the shadowy planets Rahu and Ketu, play a pivotal role in *Vedic astrology* (Jyotisha Shastra). Each planet is associated with specific energies, gods, and forces that influence human life, behaviour, and destiny. The worship of these planets has been an integral part of Hindu rituals, spiritual practices, and healing traditions for thousands of years.

1.3 Origin of Navagraha Concept

The Navagraha system is found in ancient Indian texts such as the Rigveda, Atharvaveda, and later the Puranas. These texts describe the planetary deities as cosmic forces that govern time and space, and their favourable or unfavourable positions in one's horoscope are believed to influence key aspects of life, including health, wealth, marriage, and career.

While the worship of individual planetary deities predates recorded history, the idea of grouping these planets as the Navagraha emerged in the Puranic era (circa 300-500 CE). This arrangement was based on the idea that these planets exert distinct influences over different aspects of life and the universe (Table-1.).

Table- 1. *Graha/Planets of navagraha*

SN.	<i>Graha/Planet</i>	<i>Gender</i>	<i>Element</i>
1	<i>Surya</i> (Sun)	Male	<i>Agni</i> (Fire)
2	<i>Chandra</i> (Moon)	Female	<i>Jala</i> (Water)
3	<i>Mangal</i> (Mars)	Male	<i>Agni</i> (Fire)
4	<i>Budh</i> (Mercury)	Neutral	<i>Bhumi</i> (Earth)
5	<i>Guru</i> (Jupiter)	Male	<i>Akasha</i> (Ether)
6	<i>Shukra</i> (Venus)	Female	<i>Jala</i> (Water)
7	<i>Shani</i> (Saturn)	Neutral	<i>Vaayu</i> (Air)
8	<i>Rahu</i> (ascending lunar node)	Female	<i>Vaayu</i> (Air)
9	<i>Ketu</i> (descending lunar node)	Neutral	<i>Agni</i> (Fire)

1.4 Cultural Significance of The Navagraha

In Hinduism, each of the Navagraha is believed to have both a benefic (positive) and malefic (negative) influence on human life, depending on their position in a person's astrological chart. The practice of planetary worship (*Graha Shanti*) emerged as a way to appease or enhance the favourable effects of these planets. The association of specific plants with each graha is a symbolic and spiritual representation of the energies each planet embodies (Table-2). By planting and nurturing these sacred plants, devotees seek to invite the positive qualities of the corresponding planet into their lives.

Table 2. Nine planets and the colour, direction, and plants associated with them

SN	Planet name	Direction of planting	Name of plant associated	Family
1.	Surya (Sun)	Centre	<i>Calotropis gigantea</i> (L.) Dryand	Asclepiadaceae
2.	Chandra (Moon)	S-E	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae
3.	Budha (Mercury)	North	<i>Achyranthes aspera</i> L.	Amaranthaceae
4.	Shukra (Venus)	East	<i>Ficus racemosa</i> L.	Moraceae
5.	Mangal (Mars)	South	<i>Senegalia catechu</i> (L.f.) P.J.H. Hurter & Mabb.	Fabaceae
6.	Guru (Jupiter)	N-E	<i>Ficus religiosa</i> L.	Moraceae
7.	Shani (Saturn)	West	<i>Prosopis cineraria</i> (L.) Druce	Mimosaceae
8.	Rahu (Dragon's head)	S-W	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae
9.	Ketu (Dragon's tail)	N-W	<i>Imperata cylindrica</i> (L.) P.Beauv.	Poaceae

2. OBJECTIVE OF THE STUDY

The primary aim of this study is to explore the multifaceted significance of the Navagraha vatika by examining its cultural, spiritual, ecological, and therapeutic dimensions. Specifically, the study seeks to: Investigate the ethnobotanical and Ayurvedic uses of the Navagraha plants, including their medicinal properties and applications in traditional Indian healing systems.

3. METHODOLOGY

This study adopts a qualitative–descriptive and interdisciplinary research design integrating traditional Indian knowledge systems with modern pharmacological science. Primary data were derived from classical Ayurvedic texts, Puranic literature, and temple traditions documenting the association of sacred plants with the Navagraha. Secondary data were collected through a systematic review of peer-reviewed pharmacological, phytochemical, and biomedical research articles accessed from databases such as Google Scholar and PubMed, Scopus.

4. NAVAGRAHA AND AYURVEDIC HEALING TRADITIONS

The integration of planetary worship and Ayurvedic medicine has been a cornerstone of traditional Indian health practices. Many of the plants associated with the Navagrahas are not only symbolic but also have medicinal properties. These plants are believed to hold the healing energy of the planets they represent (Table-3), and their therapeutic uses are embedded in ancient Ayurvedic texts. The healing power of these plants is thought to complement the astrological balance of the individual, promoting physical, mental, and spiritual well-being.

Table no. 3- Plants of *navagraha* and their *guna*/properties

SN	<i>Graha/Planet</i>	Name of the plant	Properties of plants
1	<i>Surya</i> (Sun)	<i>Calotropis gigantea</i>	<i>Laghu</i> (light), <i>ruksha</i> (dryness), <i>tiksna</i> (sharp), <i>usna</i> (hot)
2	<i>Chandra</i> (Moon)	<i>Butea monosperma</i>	<i>Laghu</i> (light), <i>snigdha</i> (unctous)
3	<i>Mangal</i> (Mars)	<i>Acacia catechu</i>	<i>Laghu</i> (light), <i>ruksha</i> (dryness)
4	<i>Budh</i> (Mercury)	<i>Achyranthes aspera</i>	<i>Laghu</i> (light), <i>ruksha</i> (dryness), <i>tiksna</i> (sharp)
5	<i>Guru</i> (Jupiter)	<i>Ficus religiosa</i>	<i>Guru</i> (heavy), <i>ruksha</i> (dryness)
6	<i>Shukra</i> (Venus)	<i>Ficus racemosa</i>	<i>Guru</i> (heavy), <i>ruksha</i> (dryness)
7	<i>Shani</i> (Saturn)	<i>Prosopis cineraria</i>	<i>Laghu</i> (light), <i>ruksha</i> (dryness)
8	Rahu	<i>Cynodon dactylon</i>	<i>Laghu</i> (light)
9	Ketu	<i>Imperata cylindrica</i>	<i>Laghu</i> (light), <i>Snigdha</i> (unctous)

4.1 Modern Relevance and Cultural Continuity

Despite the modernization of society, the practice of Navagraha worship continues to thrive in India and among Hindu communities around the world. The Navagraha Vatika, while deeply rooted in religious tradition, has gained ecological importance as well. The sacred trees and plants associated with the Navagrahas are integral to biodiversity conservation and sustainable farming practices. Their cultivation provides not only spiritual benefits but also contributes to the environmental health of the community. In recent years, there has been a growing interest in integrative health systems that combine traditional spiritual practices with modern wellness approaches. The Navagraha Vatika offers a unique opportunity to bridge these worlds by combining cosmic awareness, ecological conservation, and therapeutic use of plants.

4.2 Navagraha Plants with its directions:

- Swetharka or *Calotropis* : Represent Sun or surya and planted at the middle or centre.
- Palash or *Butea monosperma*: Represent Moon or chandra planted in south east direction.
- Kadhira or Nalla sandra or *Acacia catechu*: Represent Mars or Mangal and planted in south Direction.
- Apamarg or *Achyranthus Aspera* : Represent Mercury or Budh and planted in North Direction.
- Peepal or Ashwathha or *Ficus Religiosa*: Represent Guru or Jupiter and planted in the North - East Direction.
- Anjeer or Fig or *Ficus Racemosa*: Represent Venus or shukra and planted at East Direction.
- Sami or Khari or *Prosopis cenneraria*: Represent Saturn or Shani and planted in West Direction.
- Durva or *Cynodon dactylon*: Represent Rahu or Dragon's Head and planted in South West Direction.
- Darbha or Thatch Grass or *Imperata cylindrica*: Represent Ketu or Dragon's Tail and planted in North West Direction. (Fig.-1)



Fig.1 Navagraha Plants

5. PHARMACOLOGICAL AND MEDICINAL SIGNIFICANCE

The Navagraha vatika is not only a sacred collection of plants symbolizing the nine celestial bodies but also a repository of valuable medicinal plants. Each of the nine plants associated with the Navagrahas is revered for its therapeutic properties, which are deeply embedded in both Ayurveda and traditional Indian medicine. This section explores the pharmacological and medicinal significance of the plants representing each planet in the Navagraha system, highlighting their bioactive compounds, therapeutic effects, and applications in modern herbal medicine.

5.1 Surya (Sun) – *Calotropis gigantea* (Active Compounds: Calotropin, uscharin, and cardenolides.)

Pharmacological Properties:

- **Anti-inflammatory:** Useful in treating conditions such as arthritis and inflammation.
- **Antimicrobial:** Effective against various bacteria, fungi, and viruses.
- **Analgesic:** Provides relief in pain management, particularly in joint and muscle pains.

Medicinal Applications:

- **Respiratory Health:** The latex and leaves are used to treat asthma, bronchitis, and other respiratory disorders.
- **Wound Healing:** Its latex is used topically for skin diseases, ulcers, and wounds.

Caution: The plant contains toxic compounds, so it should be used under expert guidance.

5.2 Chandra (Moon) – *Cynodon dactylon* (Active Compounds: Flavonoids, glycosides, alkaloids, and tannins.)

Pharmacological Properties:

- **Antioxidant:** Protects cells from oxidative stress.
- **Anti-inflammatory:** Reduces swelling and pain, beneficial for conditions like arthritis.
- **Antibacterial and Antifungal:** Effective in treating infections and inflammation of the skin and mucous membranes.

Medicinal Applications:

- **Urinary Health:** Traditionally used to treat urinary tract infections and improve kidney function.
- **Wound Healing:** It is commonly used in Ayurveda for its wound-healing properties.
- **Digestive Health:** It aids digestion, promotes regular bowel movements, and reduces acidity.

5.3 Mangal (Mars) – *Acacia catechu* (Active Compounds: Catechin, epicatechin, tannins.)

Pharmacological Properties:

- **Antioxidant:** Helps in neutralizing free radicals, reducing cellular damage.
- **Antimicrobial:** Strong antibacterial and antifungal properties.
- **Anti-diarrheal:** The bark is widely used in treating diarrhoea and dysentery.

Medicinal Applications:

- **Skin Care:** Used in treating wounds, ulcers, and skin diseases due to its antimicrobial properties.
- **Oral Health:** The bark is used as a mouthwash to prevent gum disease and cavities.
- **Digestive Disorders:** Used in traditional medicine to treat dysentery, diarrhea, and other gastrointestinal disturbances.

5.4 Budha (Mercury) – *Achyranthes aspera* (Active Compounds: Achyranthine, triterpenoids, oleanolic acid, betaine.)

Pharmacological Properties:

- **Diuretic:** Increases urine production, helpful in detoxification.
- **Anti-inflammatory:** Reduces swelling and pain, beneficial for conditions like arthritis.
- **Antibacterial and Antiviral:** Effective against various infections.
- **Anti-oxidant:** help to combat oxidative stress and protect against cell damage.

Medicinal Applications:

- **Wound Healing:** The plant ash is used externally for ulcers and warts.
- **Respiratory Problems:** It helps in clearing the respiratory tract and relieves chronic cough and cold.
- **Dental Problems:** It's used for dental care and maintaining dental cleanliness.
- **Pain Relief:** Externally applied paste can help with pain from scorpion or mad dog bites.

5.5 Guru (Jupiter) – *Ficus religiosa* (Active Compounds: Tannins, flavonoids, β -sitosterol.)

Pharmacological Properties:

- **Antidiabetic:** Used traditionally to lower blood sugar levels.
- **Expectorant:** Aids in the expulsion of mucus from the airways.
- **Anti-ulcer:** Promotes the healing of ulcers and gastric distress.

Medicinal Applications:

- **Respiratory Health:** The leaves and bark are used to treat respiratory disorders like asthma, cough, and bronchitis.
- **Diabetes Management:** The tree's bark and leaves are used in traditional medicine to regulate blood sugar levels.
- **Wound Healing:** Its latex is used in treating cuts, wounds, and ulcers.

5.6 Shukra (Venus) – *Ficus racemosa* (Active Compounds: Triterpenoids, flavonoids, glycosides.)

Pharmacological Properties:

- **Anti-inflammatory:** Reduces inflammation in various conditions such as arthritis and joint pain.
- **Aphrodisiac:** Known for its properties that enhance sexual health and vitality.
- **Astringent:** Strengthens tissues and promotes healing.

Medicinal Applications:

- **Reproductive Health:** *Ficus benghalensis* is used in treating male and female reproductive health issues, including infertility and sexual dysfunction.
- **Liver Health:** Its leaves are traditionally used to detoxify the liver and improve its function.
- **Skin Care:** The latex is used in treating skin infections and improving skin elasticity.

5.7 Shani (Saturn) – *Prosopis cineraria* (Active Compounds: Alkaloids, flavonoids, saponins.)

Pharmacological Properties:

- **Hepatoprotective:** Protects liver cells from damage.
- **Anti-inflammatory:** Reduces pain and swelling, effective in treating joint pain and arthritis.
- **Antioxidant:** Protects cells from oxidative damage.

Medicinal Applications:

- **Diabetes Management:** Traditionally used in the treatment of diabetes and associated complications.
- **Wound Healing:** The bark and leaves are used to treat wounds and ulcers.
- **Kidney Health:** Often used in detoxification practices to support kidney function.

5.8 Rahu (Durva)- *Cynodon dactylon* (Active compounds: Apigenin, Luteolin, Ferulic acid)

Pharmacological Properties:

- **Anti-Inflammatory:** Used in inflammatory disorders, arthritis, and swelling.
- **Antimicrobial:** Exhibits antibacterial and antifungal activity against common pathogens.

Medicinal Applications:

- Fresh juice is used to stop bleeding from cuts, wounds, piles, and nosebleeds.
- Used as a cooling agent in fever and Pitta-related conditions (Ayurveda).
- Juice used in treating urinary disorders and bleeding piles.

5.9 Ketu (Darbha)- (*Desmostachya bipinnata*) (Active compounds: Quercetin, Kaempferol, Luteolin)

Pharmacological Properties:

- Diuretic: Promotes urine output; useful in urinary tract infections, dysuria, and kidney stone prevention.
- Anti-Inflammatory: Reduces inflammation and swelling in arthritis, edema, and inflammatory disorders.
- Antioxidant: Neutralizes free radicals and protects cells from oxidative stress-related damage.

Medicinal Applications:

- Used traditionally to reduce fever and heat-related conditions.
- Useful in heat disorders, excessive thirst, and burning sensations.
- Used in traditional medicine for detoxifying blood and improving skin health.

6. CONCLUSION

The plants of the Navagraha Vatika are not only culturally significant but also biologically potent, with a variety of pharmacological and medicinal properties that have been used for centuries in Ayurveda and traditional healing practices. From their ability to treat common ailments like inflammation, digestive disorders, and respiratory issues, to their role in emotional healing and spiritual well-being, these plants offer a bridge between ancient wisdom and modern science. Further research into the bioactive compounds and clinical efficacy of these plants will only underscore their therapeutic potential and help preserve their medicinal legacy.

REFERENCES

1. Chandni, G. and Navneet, S. 2017. Role of Navagraha Plants in management of Non-Communicable Diseases. *Int. J. of Ayurveda and Pharma Research*,5(4):29-33.
2. Dadhich, M. K., Sanwal, C. S., Mahajon, B., Dwivedi, H. and Sharma, R. K. 2024. Therapeutic significance of Navadurga-nine divine medicinal plants: An insight of mythology-based potential leads to healing. *Medicinal Plants*, 16(4): 610-624.
3. Devanesan, E.B., Anand, E.B., Kumar, P.S. and Basavaraju, P. 2018. Phytochemistry and Pharmacology of *Ficus religiosa*. *Sys Rev Pharm.*, 9(1):45-48.
4. Dubey, P.K., Yaduwanshi, P. and Gouttam, V., 2010. *Ficus racemosa* – gooler: A review. *Journal of Pharmaceutical Research*, 7(12): 325-341.
5. Dwivedi, S., Dubey, R. and Mehta, K. 2008. *Achyranthes aspera* L. (Chirchira): A Magic Herb in Folk medicine. *Ethnobotanical Leaflets* 12: 670-676.
6. Garg, A. and Mittal, S.K. 2013. Review on *Prosopis cineraria*: A potential herb of Thar desert. *Drug invention today*, 60-65.
7. Gupta, P. and Campus, L. 2024. The Navagrahas: An Insight into Hindu Cosmology and Beliefs. *Oeil Research Journal*, 22(10):39-56.
8. Jayalakshmi, S., and Ghosh, A.K., 2010. Pharmacognostical standardization of roots of *Imperata cylindrica* Linn (Poaceae). *J. Pharm. Sci. & Res.*,2 (8):472-476.
9. Kodolikar, C. and Vaidya, V. A. 2023. Astrological Indian Medicinal Plants-A Review. *International Journal of Medical Science and Dental Research*, 6(4):147-159.
10. Kumar, K.A., Selvaraj, K.K. and Muthukrishnan, S.D. 2013. *Cynodon dactylon* (L.) Pers.: An updated review of its phytochemistry and pharmacology. *Journal of Medicinal Plants Research*, 7(48):3477-3483.
11. Kumar, P.S. and Kalavathy, S. 2013. Review on a potential shrub *Calotropis gigantea* (L.) R. Br. *Scholars Academic Journal of Pharmacy*, 2(2):135-143.
12. Kumari, M. R., Kumar, M. Zhang, B., Amarowicz R.,Pundir, A., Rathour, S., and Lorenzo J.M. 2022. *Acacia catechu* (L.f.) Willd.: A Review on Bioactive Compounds and Their Health Promoting Functionalities. *Plants (Basel)*, 11(22):3091-3121.
13. Kumari, R. and Lal, S.P. 2023. Review on Navagraha vatika: An eco-friendly pathway to landscape gardening. *e-planet*, 21 (2): 103-110. url: <https://e-planet.co.in/publication>

14. Maneesha, S. R., Vidula, P., Ubarhande, V. A. and Chakurkar, E. B. 2021. Astrologically designed medicinal gardens of India. *International Journal of Bio-resource and Stress Management*, 12(2): 108-120.
15. Maneesha, S.R., Vidula, P., Ubarhande, V.A. and Chakurkar, E.B. 2021. Astrologically designed medicinal gardens of India. *Int. J. Bioresource. Stress Manage.* 12(2): 108-120.
16. Mishra, A., Shrivastava, P. and Jat, B. L. 2017. Traditional uses of Ayurvedic medicinal plant in reference to Kathuria and Dangauria Tharus of Sohelwa Forest, Balrampur Uatter Pradesh. *World Journal of Pharmaceutical Research*, 6(7):658-677.
17. Parihar, S. and Sharma, D. 2021. Navagraha plants: the traditional uses and the therapeutic potential of nine sacred plants of India that symbolises nine planets. *IJRAR*, 8(4): 96-108.
18. Satendra, B. 2022. An Examination of Navagraha Vatika: A Sustainable Approach To Landscape Gardening. *International Research Journal of Human Resource and Social Sciences*, 9(10):181-191.
19. Sharma, P. and Lingha, R. 2021. A recent update on the pharmacognostical as well as pharmacological profiles of the *Acacia catechu* heartwood: A mini review. *Journal of Ayurveda and Holistic Medicine*, 7: 188-192.
20. Shrivastava, V., Tomar, R. S., Mishra, R. K., Jyoti, A. and Kaushik, S. 2014. Medicinal potential of some mythologically important plants of India: A Review. *Int. J. of Multidisciplinary and Current research*, 2(1): 99-103.
21. Sikarwar, R. L. S. 2016. Saga of Indian sacred plants. *Indian Ethnobotany: Emerging Trends*. Joghpur: Sci. Publ, 162-180.
22. Soni, R., Singh, N., Singh, G. and Raj, S. 2023. Significance of Plants in Vedic Astrology, their Socio-Religious Beliefs, Conservational and Therapeutic Aspects. *Ecology, Environment and Conservation*, 29(1):206-214.
23. Tiwari, P., Jena, S. and Sahu, P.S. (2019). *Butea monosperma*: phytochemistry and pharmacology. *Acta Scientific Pharmaceutical Sciences*, 3(4): 2581-5423.
24. Zaveri, S. H. Traditional uses, therapeutic potential and biological active components of nine scared Indian plants that exemplifies nine planets (navagraha). *Recent trends of innovations in chemical and biological sciences*, volume iii, 1.
25. Soni, R., N. G. Singh and Raj, S. (2023). Significance of Plants in Vedic Astrology, their Singh, Socio-Religious Beliefs, Conservational and Therapeutic Aspects. *Eco. Env. & Cons.* 29 (1): 273-297.