



SIGNIFICANCE OF ASHLESHA NAKSHATHRA AND NAGAKESARA VRIKSHA IN AYURVEDA- REVIEW ARTICLE

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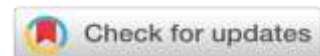
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ABSTRACT

Ashlesha nakshatra is one of the most essential nakshatra among all nakshatra. Among 27 nakshatra, Ashlesha stands in 9th position. Ayurveda is the science of physical, psychological, and social well-being. In Ayurveda, nakshatras are considered when determining auspicious times for health-related practices like medication and surgery. Especially in Raja Nighantu, the author correlated all the nakshatra with a particular medicinal plant. As mentioned, Naga keshara vriksha represents the Ashlesha nakshatra.

Keywords: Ayurveda, Nakshatra, Ashlesha.

INTRODUCTION

Herbs and nakshatra played essential roles in ancient human life. Nakshatra is a mythical figure formed by stars in the sky. Vedic astrology describes nine grahas, 12 rashi and 27 nakshatras. It is believed that every person planting and caring for a tree, animal, or bird, according to individual rashi/ nakshatra, pleases

the ruling deity. The concept says that the position of these rashes/nakshatra at birth or their movement in the celestial globe influences human beings. Our ancestors established navagraha/ rashi/ nakshatra vatika near sacred places with respective plants to worship and ensure good health. According to the Raja

nighantu, Ashlesha nakshatra is represented by Naga keshara vriksha¹.

1. Aslesha Nakshatra



Figure1: Sign of Ashlesha nakshatra

God Skandha (Sarpamrutha)

In Indian astronomy, 27 nakshatras are mentioned, which were first found in Jyotish Vedanga. Jyotish is one of the Anga of Rigveda. Ayurveda is the upaveda of Atharva Veda. The fundamental source of Ayurveda and Jyotish shastra is the Vedas—Ashlesha nakshatra ruling by Budha (mercury) graha². Ashlesha nakshatra belongs to Karkataka rashi and is ruled by Chandra (moon). According to the nakshatra shashtra, the Adhipathi of Ashlesha nakshatra is Naga devatha / God Skandha³.

2. Adhipathi of Ashlesha nakshatra: God Skandha (Sarpamrutha)

There is a shloka which is used to pray to God Skandha:

“Shri sarpa swarupa dharaya namah” (Skandhapurana)

According to the skandhapurana, sarpadevata is one of the synonyms of God Skandha.

In icons, he is shown as a boy, either with one head and two arms or six heads and twelve arms. His lance



Figure 2: Adhipathi of Ashlesha nakshatra

and his peacock are also prominently displayed. A fowl adorns his banner. His six heads represent the five sense organs and the mind, which co-ordinates their activities. When these are controlled, refined, and sublimated, man becomes a superman. This is the implication of symbology.

The lance of dazzling brightness is the weapon with which this Devasenapati defeated many enemies. It stands for knowledge and wisdom, with which all the ugly demons of ignorance can be destroyed.

The peacock is his mount, a pious bird that grips a serpent with its feet, symbolising the ego and desires of people. The peacock represents the destroyer of harmful habits and the conqueror of sensual desires. Kartikeya carries a spear in one hand and always blesses devotees with his other hand. Kartikeya's symbolism thus points to the ways and means of reaching perfection in life.

3. Relationship between Body parts and astrology

Astrological criteria	Corresponding body parts & functions	Health Problems:
Ashlesha Nakshatra	Lungs, stomach, pancreas, liver and oesophagus.	Blood-related diseases Digestion problems
God Skandha	Sign of ever youth, five sense organs, Mind	Mental disorders, Skin disorders

Budha Graha	Chest, skin, nose, tongue, face, hair, nervous system, arms, Naval, Gall bladder, liver, Pancreas, lungs	Disorders related to blood, nerves, muscle, chest, Skin, typhoid, paralysis, cholera, loss of hair and arm injuries.
Karkataka Rashi	Breasts/chest, digestive system	
Chandra	Mind, eye, brain, heart, blood, lymphatic duct artery, Menstrual cycle. lungs, breast, body fluids, intestines, renal ducts,	Sleeplessness, asthma, blood problems, menstrual cycle problems, diabetes, lung disorders, cough, throat problems, weak knees, and respiratory problems.

We can analyse the Ashlesha nakshatra using the relevant Rashi and graha based on the above information. It mainly controls.

- anatomy and physiological function of the Bloodstream/Cardiovascular system
- Lungs and pulmonary functions
- Digestion system / Hormones
- Sensory organs / CNS / Mental status.

e) Maintenance of youthfulness/rejuvenation

4. Ashlesha Nakshatra and Ayurveda - Nakshatra vriksha—Rajanighantu stated different vriksha for different nakshatras, and for Ashlesha nakshatra, he mentioned Nagakeshara vriksha¹.

SI	Nakshatra	Vriksha
01	Ashwini	Vishathinduka
02	Bharani	Amalaki
03	Kritika	Taru/Dhawa
04	Rohini	Hemadugdha
05	Mrigashira	Jambu
06	Ardra	Khadira
07	Punarvasu	Krishna vamsha
08	Pushya	Ashwatta
09	Ashlesha	Nagakeshara
10	Magha	Vata
11	Purva phalguni	Palasha
12	Uttar phalguni	Plaksha
13	Hasta	Bharangi
14	Chitra	Bilva
15	Swati	Arjuna
16	Vishaka	Vikankata
17	Anurada	Keshara
18	Jyeshtha	Shalmali
19	Moola	Shaala
20	Purvashada	Vanjula
21	Uttarashada	Arka
22	Sharavan	Panasa
23	Dhanishta	Shami
24	Shatabisha	Kadamba
25	Purvabhadra	Amra
26	Uttarabhadra	Nimba
27	Revati	Madhuka

5. Ashlesha Nakshatras Vriksha - Nagakeshara

Botanical name: *Mesua ferrea*

Family: [Calophyllaceae](#)



Types: White variety and red variety (both have the same guna karma: Nighantu Adarsha, Bapalaal vaidya)

Part used: Stamens/ bark stem.

Dosage: Powder 1-3 grams per day

Vernacular name: Assamese - Nokte, Nahor

Eng - Ceylon ironwood

Hindi - Nag Keshar, Nag Champa

Kannada - Naga sampige, atha,

Naga champaka, Naga keshar

Malayalam - Nagapoov, Churali,

Naga champakam

Substitute and adulterants.

1. Stamens of lotus

2. Immature floral buds of Punnaga (*Callophylum innophyllum*)

Chemical composition: Mesuol, Mammeusin, Mammegin, bioflavonone called Mesuaferrone A & B Mesuabixanthone A & B, Mesuaxanthone A & B, Euxanthone, Messianic acid.

Ayurvedic Pharmacological Properties of Nagakeshara

Rasa: Tikta (bitter) and Kashaya (astringent)

Guna: Laghu (light), Ruksha (dry), Teekshna (piercing)

Virya: Ushna (hot)

Vipaka: Katu (pungent)

Effect on Dosha: Balanced Kapha and Pitta dosha.

Roghagnatha: Asrigdara, Raktharshas, Kustha, Kandu, Vrana, visha, Ama dosha, Chardi, Hrullasa, Hikka, Garbhashaya shodhana, Arthava Vyapath

Pharmacological activities:

Antioxidant activity⁴⁻¹⁰

Analgesic activity¹¹

Anti-inflammatory activity¹²⁻¹⁴

Anti-arthritis activity¹⁵

Antispasmodic activity¹⁶

Antivenom activity¹⁷

Antimicrobial & anti-fungal activity¹⁸⁻²⁶

Water disinfectant activity²⁷

Diuretic activity²⁸

Anti-haemorrhoid activity²⁹⁻³⁰

Wound healing activity³¹

Central nervous system depressant and anticonvulsant activity³²

Immunomodulatory and hormone-balancing activities³³

Anti-diabetic activity³⁴

Hepatoprotective activity.³⁵⁻³⁶

Cardioprotective activity³⁷

Protection against chronic obstructive pulmonary disease (COPD)³⁸

Anticholinesterase and α -amylase inhibitory activity^{6/39}

Anticancer activity⁴⁰⁻⁴¹

Ayurvedic medicines with Nagkesar as an ingredient:

1. Gulgulwasavam is used to treat diseases of the liver and spleen.
2. Mahanarayan oil is one of the best pain-relieving oils.
3. Puga Khanda - used to treat vomiting, gastritis, dyspepsia, abdominal colic pain, and dizziness.
4. Mahadraksha is used to treat diseases related to the respiratory and digestive tract.
5. Shringarabhra Rasa is used to treat respiratory and digestive disorders.
6. The notes-worthy formulations of Nagakeshar are-
Brahma Rasayana, Chyawanprash,
Chandanbalakshadi Taila, Kumariasava,
Poogakhanda, Mahanarayana taila, Nagkesaradi churna etc.
7. In addition, this is used as a substitute for original Kesar (saffron), and hence, it finds its place as a flavouring agent in many Lehyam, Asavas and arishtas.

Amayika Prayoga

Charaka Acharya - Raktharshah su - Kesara navaneetha sharkarabhyasath...I

Arshasu
apayanthi rakthani II
Chi. A. 2

Susrutha Acharya - Hikkayam - Kshaudram sitam varanakesharam cha I

Pibed
rasenekshu
madhukajen II U.50
- 24

Shodala Nighantu - Asrugdhare – Thakrashanartha samyak sanpibennagakesharam I

Vangasena samhitha - Rakthathisare -
.....sithaya saha I

Nagakeshara churna va rak-
tha sangrahanam param II

Raja Marthandah- Puthraprasavartham- Gomuthrena saha nagakesharam shlakshna

Churnithamruthau nithambini I

Gavyadugdhaniratha
pibedyadi syaththada
niyathameva veerasuh II

Bhava Prakasha Nighantu -Laghavam pachanam
Jvara kandu trisha sweda
chardi hrillasa nashanam II (60)

According to the Classical categorisation

In Susrutha Samhitha

Eladi Gana

Eladi gana is indicated as kushthghna, vishaghna (mitigates toxins), varnaprasadan (bestows the colour of skin), kandughna (cures itching), and kothapida-kanashana. This gana can be used in dadrukushtha and vicharchika, where the main symptoms are pidaka (eruptions) and kandu. Eladi gana is given as varnya, so like lodhradi gana, it can be used as varnaprasadan after treating kushtha for hyperpigmentation.

As eladi gana is mentioned as vishaghna, it can be used for skin disorders formed due to allergens. The eladi gana siddha taila can be used as an external application. The most crucial use of eladi gana is in diseases like sheetapitta, udarda, and kotha. According to Madhava Nidana, the main symptoms of these diseases are kandu, kotha, and pidaka 42. As eladi gana is mentioned as kandu kotha pidakanashan, it can be used internally and externally. Sheetapitta (Allergic reactions) is vata dominance, udarda is kapha dominance disease⁴³, and eladi gana is vatakaphaghna, so it fulfils both the criteria, i.e. vyadhipratyanik and doshaghna.

Vachadi Gana

The benefits of Vachadi gana are that it purifies breast milk, relieves amatisara and nascent diarrhoea, and significantly ripens/mitigates the doshas.

Furthermore, one research proved its benefits to the digestion system: Vachadi Gana Basti was prepared by combining the taila, Madhu, gomutra, and lavana, which consist of ushna and tikshna guna. Taila has anupravana bhava. Due to that, it passes through the ileocecal valve and reaches up to Grahani, where it is absorbed. Basti inhibits fat absorption by reaching up to grahani. Hence, it pacified Samana vayu, brought Jatharagni to its average level and activated the vyana vayu to break the Srotosanga and synergise the action of Lekhan therapy at the cellular level. The basti drug

consists of kasaya, tikta and katu rasa, so that properties potentiate the action of lekhana medicine⁴⁴.

Anjanadi Gana

Benefits - This Anjanadi gana cures bleeding diseases and severe burning sensations inside the abdomen

Priyangvadi Gana

Benefits—Priyangvadi Gana cures chronic diarrhoea, unites fractures, is suitable for diseases of Pitta origin, and even heals ulcers.

Bhavaprakasha Nighantu

Karpuradi Varga

Dhanvanthari nighantu/ Shodala nighantu

Shatapushpadi varga

Raja nighantu

Pippalyadi gana

Nagakeshara in raktaja roga (Blood stream/Cardiovascular/Spleen/Liver)

It is mainly used as a styptic to arrest bleeding in several diseased conditions.

It has a proven effect in regularising the menstrual cycle, significantly reducing the

Metrorrhagea.

Nagakeshara also proved its ability to perform hepatoprotective activity and blood purification/anti-venom activity.

Relevant Research

1. Hepatoprotective activity has proven research.

Evaluated the hepatoprotective effects of methanol extract of Mesua ferrea flowers in Staphylococcus aureus inoculated male Wistar rats. One week of treatment with 50,100 and 200 mg/kg of methanol extract showed significant improvement in the levels of liver enzymes like CAT, SOD, GPx and GR with a concomitant decrease in the level of AAT and AST enzymes³⁴.

Another study evaluated the hepatoprotective effects of different stamen extracts using an in vitro carbon tetrachloride-induced oxidative stress liver slice culture model. The finding revealed n-hexane and ethanol extracts of stamens protect cultured liver slice cells against carbon tetrachloride-induced oxidative stress³⁵.

Another study found that the methanolic extract of dried flowers of Mesua ferrea has antioxidant and

hepatoprotective activity in female Wistar mice. At the onset of the experiment, S. aureus was administered in drinking water for 24 hours to induce an artificial infection. The results showed a significant reduction in catalase (CAT), Glutathione (GPX), Glutathione reductase (GR), and Alanine aminotransferase (ALT) activity. No change was observed in Creatinine phosphokinase (CPK) and creatinine activity in mice¹⁰.

2. Anti-hemorrhoid activity proven research

A polyhedral formulation containing Mesua ferrea was evaluated for its efficacy in treating bleeding piles in a preliminary clinical study using 22 human subjects. The finding revealed that out of 22 subjects, 16 patients showed improved bleeding with no noticeable adverse effects²⁸. Another recent study also highlighted the efficacy of standardised herbal preparations (Daflon and Roidosan) containing Mesua ferrea in improving anorectal conditions in Grade I and II patients²⁹.

3. Wound healing activity proven research

It was reported that the tannin isolated from the ethanol extract of aerial parts of Mesua ferrea has promising wound healing activity in excision and incision wound rat models. The extract was applied as an ointment. Increased epithelialisation and wound contraction were found in the animal models³⁰.

4. Cardio-protective activity proven research

A polyherbal drug (Ashwagandharishta) and its marketed preparation containing stamens of Mesua ferrea have been shown to protect against isoproterenol-induced myocardial infarction in the albino rat model. Treatment with herbal

formulation also significantly prevented the isoproterenol-induced adverse changes in the levels of serum marker enzymes such as alanine aminotransferase, aspartate aminotransferase, creatine kinase and lactate dehydrogenase with simultaneous improvement in the serum lipid profile. The cardioprotective activity of herbal

formulation was due to an increase in the in-vivo antioxidant level of GSH and inhibition of lipid peroxidation of cardiac membranes in the treated rats³⁶.

5. Antivenom activity

Investigated that the aqueous extract of *Mesua ferrea* leaves possesses anti-venom activity against fibroblast cell lysis after *Heterometrus laoticus* scorpion bite. The extract was evaluated against the viability of fibroblast cells after 30 min treatment with mock control or with 0.706 mg/ml plant extracts pre-incubated with *H. laoticus* venom. Viability of fibroblast cells after 30 min treatment with mock control or with 0.706 and 0.406 mg/ml showed efficiency in protecting against venom-induced lysis¹⁷.

Nagakeshara Effect on Lungs and Pulmonary Functions Relevant research

1. Management of allergic asthma

One of the research studies statistically proved and suggested the potential role of *Mesua ferrea* stamens extract in the treatment and management of allergic asthma by attenuating ongoing inflammatory processes, mediated via inhibiting subsequent infiltration of eosinophils, lymphocytes, and neutrophils into lungs, airways, and release.

Of inflammatory and noninflammatory mediators. Further, studies on bioactives present in *M. ferret* may be advised to investigate its mechanism of action at molecular and cellular levels.

2. Protection against chronic obstructive pulmonary disease (COPD)

They conducted a study of rats. The study showed that an herbal formulation (Bresol) comprising *Mesua ferrea* flowers has protective effects against cigarette smoke-induced COPD in rats. The rats were treated with 250 and 500 mg/kg for five weeks. The finding revealed improved reduced tracheal inflammation and decreased TNF- α and total protein levels in the bronchoalveolar lavage fluid. It maintained the standard cellular architecture of the trachea and lungs³⁸.

3. Anti-inflammatory activity-proven research

It was reported that the xanthones, i.e., mesuaxanthone-A, mesuaxanthone-B, calophyllin-B, dehydrocycloguanandin, euxanthone, jacareubin and 6-desoxy jacareubin have promising anti-inflammatory activities in carrageenan-induced paw oedema rat models¹². In addition, an Ayurvedic formulation

(Shirishavaleha) containing *Mesua ferrea* in combination with other herbs has been shown to inhibit oedema development in the carrageenan-induced paw oedema model¹³. Similarly, another recent study reported that 80% ethanol extract of stem bark of *Mesua ferrea* has promising anti-inflammatory activity in various in vitro bioassays. Results revealed that ethanol extract at the concentration of 100,200 and 500 μ g/ml has more potent anti-inflammatory activity in all in vitro bioassays than the standard drug, i.e. Indomethacin¹⁴.

Nagakeshara effect on Digestion system / GIT / Hormones relevant research

1. Immunomodulatory and hormone-balancing activities

Studied the effect of mesuol isolated from the seed oil of *Mesua ferrea* for immunomodulatory activities using both humoral and cellular immune assays. In the humoral immune response assay, mesuol significantly increased the antibody titre values in the rats³³.

2. Antidiabetic activity

Reported that the methanol extract of *Mesua ferrea* leaves has promising antidiabetic activity in streptozotocin-induced diabetic rats. It was found that the extract reduced the blood glucose levels and normalised the body weight in diabetic rats³⁵. Immunomodulatory and hormone-balancing activities studied the effect of mesuol isolated from the seed oil of *Mesua ferrea* for immunomodulatory activities using both humoral and cellular immune assays. In the humoral immune of Mesua assay, mesuol significantly increased the antibody titre values in the rats.

3. Hormonal imbalance and menstrual disorders³⁴

In addition, the flower extract of *Mesua ferrea* has also been shown to possess estrogen and progesterone-like effects, which helped correct hormonal imbalance during menstrual disorders³⁴.

Nagakeshara effect on Sensory organs / CNS / Mental status in human-relevant proven research

1. Analgesic activity

Investigated that the non-polar (n-hexane) fraction of *Mesua ferrea* leaf has better antinociceptive activity against an acetic acid-induced visceral pain in mice.

The finding revealed that the non-polar fraction possesses better analgesic activity as compared to the polar fraction¹¹.

2. Antispasmodic activity

An in vitro study was conducted to evaluate the antispasmodic activity of petroleum extract of *Mesua ferrea* in the rat ileum. The contraction of the rat ileum was measured on a chymograph. The normal contraction of acetylcholine was reduced up to 70 and 86%, whereas the typical response of acetylcholine in the presence of atropine was reduced to 55% [88]

3. Anticholinesterase and α -amylase inhibitory activity

A recent study highlighted that the secondary metabolites isolated from different species of *Mesua*, including *Mesua ferrea*, have acetylcholinesterase inhibitory activities and have the potential to be used in Alzheimer's disease⁶. Revealed that *Mesua ferrea* extract has moderate α -amylase inhibitory activity with an IC50 value of 146.8 $\mu\text{g/ml}$. At the same time, the standard drug, acarbose, showed vigorous α -amylase inhibitory activity with an IC50 value of 14.24 $\mu\text{g/ml}$ ³⁹.

4. Central nervous system depressant and anticonvulsant activity

From a reported study, Xanthonones (mesuaxanthone-A, mesuaxanthone-B, chlorophyllin-B, dehydrocycloguanandin, euxanthone, jacareubin and 6-deoxy jacareubin) were found to have CNS depressant effects in both mouse and rat models. Typical CNS depressant effects, i.e., ptosis, sedation, loss of muscle tone and reduced spontaneous motor activity, were observed in the xanthonones-treated animals and reported that the flower extract of *Mesua ferrea* has significant anticonvulsant activity in the pentobarbital-induced mouse model 32.

Maintenance of youthfulness/rejuvenation relevant research

1. Antioxidant activity

The antioxidant potential of *Mesua ferrea* L. was evaluated in an in vitro study. The ethanol extract of *Mesua ferrea* leaves was tested for its antioxidant activity by using a test like 2,2-diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging.

The findings revealed that 70% of the ethanol extract of *Mesua ferrea* leaves possess significant antioxidant activity⁴. Another study conducted by Sahu Aalakh, and colleagues showed modest antioxidant activity of the methanol extract of flowers in DPPH free radical, superoxide, and hydrogen peroxide scavenging assays⁵.

It was reported that the polar extract (methanol) of *Mesua ferrea* roots was more active compared to less polar and non-polar extracts⁶. The promising antioxidant activities of water and hot water extracts of *Mesua ferrea* flowers were reported in the DPPH scavenging assay. The finding revealed that water extracts of *Mesua ferrea* flowers possess more potent antioxidant activity than standard agents, i.e., butylated hydroxytoluene (BHT) with EC50 values of 7.49 and 6.95 $\mu\text{g/ml}$, respectively⁷.

It was reported that the chloroform and methanol extracts of *Mesua ferrea* stem bark have good antioxidant activity in the in vitro models. The extracts were found to protect erythrocytes, haemoglobin, and DNA against oxidative stress-induced damage. The finding revealed that methanol extract possesses vigorous activity compared to chloroform extract⁸. In another recent study, n-hexane extract of *Mesua ferrea* stamens has been reported to possess good free radical scavenging activity with an IC50 value of 66.3 $\mu\text{g/ml}$ ⁹.

DISCUSSION

	Corresponding body parts & functions relevant to the nakshatra	“Nagakeshara” proven pharmacological activities
01	Anatomy and physiological function of the Bloodstream/Cardiovascular system	Hepatoprotective activity proven research Anti-hemorrhoid activity proven research Wound healing activity proven research Cardioprotective activity proven research Antivenom activity

02	Lungs and pulmonary functions	1. Management of allergic asthma 2. Protection against chronic obstructive pulmonary disease (COPD) 3. Anti-inflammatory activity proved research
03	Digestion system / Hormones	Immunomodulatory and hormone-balancing activities Antidiabetic activity
04	Sensory organs / CNS / Mental health.	Analgesic activity Antispasmodic activity Anticholinesterase and α -amylase inhibitory activity Central nervous system depressant and anticonvulsant activity
05	Maintenance of youthfulness/rejuvenation	Antioxidant activity Formulations of Nagakeshara, which is used for rejuvenation - Brahma Rasayana, Chyawanprash, Chandanbalalakshadi Taila, Kumaryasava, Poogakhanda, Mahanarayanataila, Nagkesaradi churna etc.

CONCLUSION

In Vedic medical astrology, a planet represents some part of the human body and biological functions. During the unfavourable planetary transit or ashubh graha-dasha, a person has to suffer from one or many diseases. The health complications are represented by the planet that gets affected. Comparison of the relevant body parts and functions denoted by Ashlesha nakshatra and Ayurvedic clinical indication of Nagakeshara in anatomy and physiological function of the Bloodstream/Cardiovascular, Lungs and pulmonary functions, Digestion system / Hormones, Sensory organs / CNS / Mental status in human and Maintenance of youthfulness/rejuvenation reveals that the plants mentioned according to the nakshatra can be used as medicine as well as worshipped to alleviate diseases and obtain divine peace.

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44. **Shweta Parwe, Milind Nisargandha** A Comparative Study to Evaluate the Efficacy of Lekhana Basti and Modified Vachadi Gana Basti in Combination with Navaka Guggulu in Sthaulya (Obesity) -A Study Protocol, June 2021 *Journal of Pharmaceutical Research International* 33(30A)

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