

Shirishapushpadi Yoga in Sarpa Visha: A Review

Aishwarya Mallasure*, Rakshith N. N., Anjana R. Nath

Department of Agada Tantra evam Vidhi Vaidyaka, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka.

ABSTRACT

Snake envenomation remains a major public health concern in India, particularly among rural & agricultural populations where snake encounters are more common. Agada tantra is one of the eight branches of Ayurveda that describes several traditional formulations for the management of various types of poisoning. *Shirishapushpadi yoga* is one such formulation which is explained in Agada tantra for treating *Sarpa visha* (snake envenomation). It is mentioned under *Sarpa visha pratishedha adhyaya* of Ashtanga Sangraha. It contains mainly 2 ingredients & described for administration in different dosage forms like *Pana* (oral administration), *Nasya* (nasal administration) & *Anjana* (collyrium). This review aims to explore the classical references, ingredients, properties & karma of *Shirishapushpadi yoga*. It further intends to examine the rationale behind its traditional use in *Sarpa visha*, discuss its potential relevance in the management of poisoning from an Ayurvedic perspective, and contribute to the scientific understanding of its traditional therapeutic applications.

Keywords: Ayurveda, Agada tantra, Shirishapushpadi yoga, Sarpa visha, Snake envenomation

INTRODUCTION:

Ayurveda is a traditional system of medicine and healthcare; there are mainly eight clinical specialities in it, and Agada tantra is one among the eight branches which deals with different types of poisoning conditions, their diagnosis & management. Several *Agada yogas* (Therapeutic formulations) have been explained by Acharyas for treating various diseases, poisoning conditions & skin manifestations due to poisoning. *Shirishapushpadi yoga* is one among the *Agada yogas* that has minimal & easily available ingredients, which is explained in Astanga Sangraha in the context of *sarpa visha chikitsa* (Treatment of snake envenomation). Snake bites affect an estimated 5.4 million people worldwide each year, with 1.8 to 2.7 million cases of envenomation. Around 81,410 to 137,880 people die each year because of snake bites, and around 3 times as many amputations and other permanent disabilities are caused by snakebites annually¹. A recent study reported a mortality rate of 0.33 deaths per 100,000 population. In India, the researchers extrapolated their findings to estimate approximately 120,852 snakebite cases annually.² In Agada tantra, various formulations & therapeutic approaches have been described for the management of snake envenomation that remain unexplored

through contemporary scientific research; therefore, further systematic research of such formulations may help to determine their therapeutic potential & possible complementary role in snakebite management. In this article, an attempt is made to review the ingredients, properties, method of preparation, mode of action, administration and uses of *shirishapushpadi yoga*, which is indicated in *sarpa visha chikitsa* (Treatment of snake envenomation).

AIM AND OBJECTIVE:

To review the formulation *shirishapushpadi yoga*.

MATERIALS AND METHOD:

Various classical Ayurveda texts such as Charaka Samhita, Astanga Sangraha, Astanga Hridaya, Agada Tantra & Dravyaguna literature, and their available commentaries and translations were referred.

Relevant literature was identified using keywords such as Ayurveda, Agada tantra, Shirishapushpadi yoga, Sarpa visha, Snake envenomation in PubMed, Google Scholar, HeliNet and other accessible sources.

REVIEW OF LITERATURE:

Shirishapushpadi yoga is explained in Agada Tantra for treating *Sarpa visha* (snake envenomation), *Sarpa*

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



visha pratishedha adhyaya of Ashtanga Sangraha³; it is also mentioned in Ashtanga Hrudaya⁴ & Charaka Samhita in the context of *sarpa visha chikitsa* (Treatment of snake envenomation)⁵.

Table 1: Ingredients of Shirishapushpadi yoga

SL. NO.	PLANT	BOTANICAL NAME	FAMILY	PART USED
1	<i>Shirisha</i> ⁶	<i>Albizia lebbeck</i> Benth.	Mimosaceae	Flower
2	<i>Shigru(sita maricha)</i> ⁷	<i>Moringa oleifera</i> Linn.	Moringaceae	Seeds

RASA PANCHAKA**Table 2: Properties of Shirishapushpadi yoga**

SL. NO.	PLANT	RASA	GUNA	VEERYA	VIPAKA	DOSHAGHNATA & KARMA
1	<i>Shirisha</i>	<i>Kashaya, Tikta, Madhura</i>	<i>Laghu, Rooksha, Teekshna</i>	<i>Anushna</i>	<i>Katu</i>	<i>Tridosha shamaka Vishaghna, Shothahara, Kasahara, Shwasahara, Visarpahara, Vranahara, Varnya, Kushtaghna, Kandughna, Twak doshahara, Pamakushtahara</i>
2	<i>Shigru(Sita maricha)</i>	<i>Katu</i>	<i>Laghu, Rooksha, Teekshna Sara</i>	<i>Ushna</i>	<i>Katu</i>	<i>Vatakaphashamaka Deepana, Rochana, Vidahakara, Sangrahi, Shukrala, Hridya, Chakshushya, Swayathuhara, Krimighna, Vishaghna, Vranahara, Medohara, Kushtaghna, Shulahara, Swasahara, Mukhajaadhya-hara</i>

Method of preparation⁸:

Shigrubeeja/ sita maricha (seeds of *Moringa oleifera*) soaked and macerated in the juice of flowers of *Shirisha* (*Albizia lebbeck*) for seven days (*saptavasara bhavitam*).

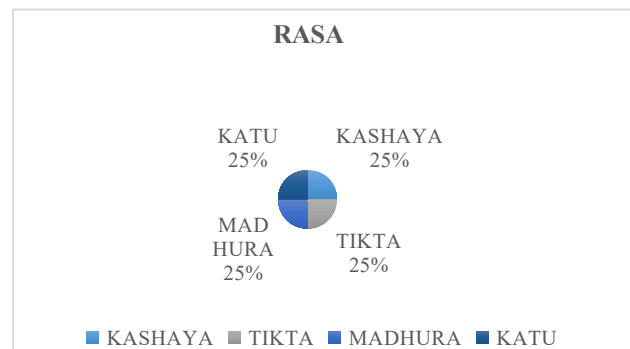
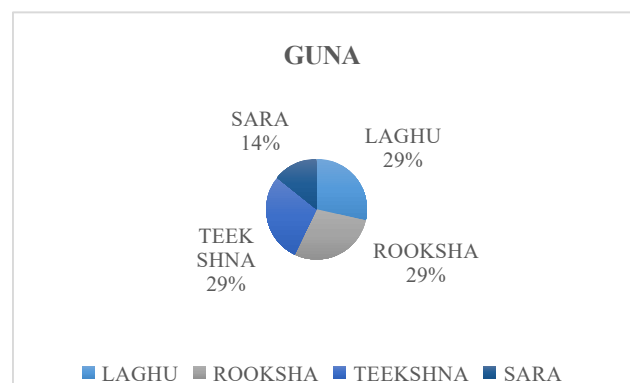
Mode of administration: *Pana* (Drink), *Nasya* (Nasal administration), *Anjana* (Collyrium)

Dose: Exact dose is not mentioned in texts; hence standard dosage can be considered for different modes of administrations

Indication: *Sarpa visha* (Persons bitten by snake)

RESULTS:

Shirishapushpadi yoga is mainly mentioned in *Sarpavisha pratishedha adhyaya* of Astanga Sangraha. It has 2 ingredients: *Shirisha* (*Albizia lebbeck* Benth.) & *Shigru beeja*, also referred to as *sita maricha*, which is mentioned by Indu commentary in Astanga Sangraha (seeds of *Moringa oleifera* Linn.)⁴; its action on *sarpa visha* (snake envenomation) can be explained based on *rasa panchaka*

**Figure 1: Analysis of rasa (Taste) of shirishpushpadi yoga (Table 2)****Figure 2: Analysis of guna (Properties) of shirishpushpadi yoga (Table 2)**

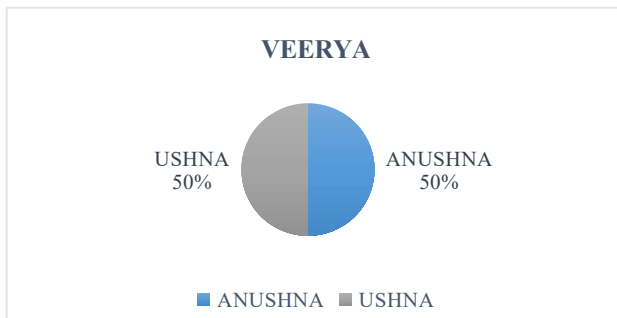


Figure 3: Analysis of veerya (Potency) of shirishpushpadi yoga (Table 2)

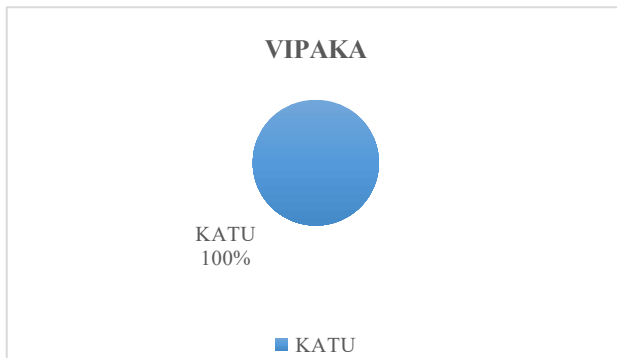


Figure 4: Analysis of vipaka of shirishpushpadi yoga (Table 2)

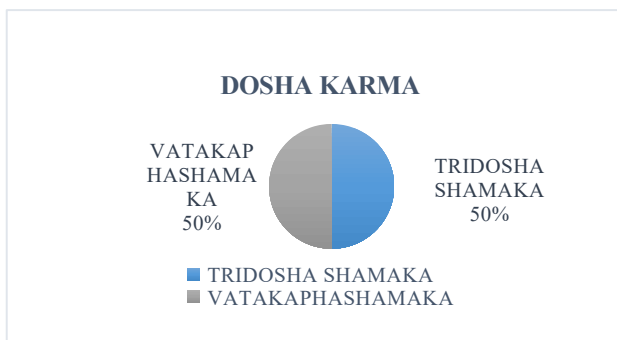


Figure 5: Analysis of doshagnata of shirishpushpadi yoga (Table 2)

Most of the drugs in the formulation have *Kashaya*, *tikta*, *Madhura* & *katu rasa*. *Laghu*, *rooksha*, *teekshna* and *sara guna*. *Ushna* & *anushna veerya*. *Katu vipaka* & in *dosha karma*, it is *tridosha shamaka*, mainly *vata-kaphashamaka*. Both of the drugs have *vishaghna* (Anti-venomous), *vranahara* (wound healing), *shothahara* (anti-inflammatory) & *kandughna* etc properties.

DISCUSSION:

Agada tantra describes several approaches to *Visha chikitsa*, including formulations for different types of poisoning. In this context, *Shirishapushpadi yoga* is noteworthy because of its indication in *sarpavisha chikitsa*; it has only 2 ingredients, which are also

easily available. This review brings together the classical references, ingredients, preparation method, properties, and modes of administration associated with the *Shirishapushpadi yoga*. *Shirisha* and *Shigru* are the two principal ingredients identified in the formulation. This formulation is predominant in *kashaya*, *tikta*, *madhura* & *katu rasa*; it is *vatahara* due to *madhura rasa* & *ushna veerya*, *pittashamaka* due to *kashaya*, *tikta*, *madhura rasa* & *kaphashamaka* due to *katu vipaka*, which in turn might act as *tridoshashamaka*, which pacifies the *tridosha* vitiation due to *visha* & can be useful in all kinds of *sarpa dashta* (snake bites) as indicated in the text. Their individual properties, as described in literature, provide a traditional basis for understanding their inclusion in the preparation. However, the properties of individual ingredients cannot, by themselves, establish the therapeutic action of the complete formulation against snake venom.

The seed extract of *shirisha* (*Albizia lebbek*) is tested in laboratory assays & mice, which reported the inhibition of certain venom-associated enzymes, reduction in venom-induced haemorrhage & myotoxicity under study conditions⁹. As *shirishapushpa* is mentioned in the part used for preparation of this yoga, both the *shirisha* seeds and flowers have a few similar compounds like saponins (*Albiziasaponins*, *Lebbecksides*, *Echinocystic acid derivatives*), *Flavonoids* & *phenols* (like *Quercetin*, *kaempferol*, *Rutin*), which describe the *Vishaghna* (Antivenomous activity) of *shirisha*.^{10,11} Similarly, the experimental study examined ethanolic leaf extract of *Shigru* (*Moringa oleifera*) in rats and reported effects on venom-induced haemorrhage, haemolysis and selected biochemical changes.¹² As the seed of *shigru* is mentioned in the formulation, both seeds and leaves present a few similar phytochemical constituents like *alkaloids*, *flavonoids*, *saponins*, and *tannins*¹³, which may be contributing to the *vishaghna* (anti-venomous activity) of the drug. These findings may be discussed in relation to the traditionally described *Vishaghna* (anti-venomous activity), *Vranahara* (wound-healing) and *Shothahara* (anti-inflammatory) properties of *Shirisha* & *Shigru*. However, further research is required to establish the relationship between these traditional properties and the observed experimental effects.

The preparation method explained in the text, involving the use of *Shirisha* flower juice for processing

Shigru seeds, is an important feature of the formulation. This method needs further investigation to determine whether processing influences the chemical composition, stability or biological activity of the resulting preparation. The classical references also describe different routes of administration, namely *Pana*, *Nasya*, and *Anjana*. Their suitability, safety, dosage, and clinical relevance require further scientific evaluation.

CONCLUSION:

Shirishapushpadi yoga is a classical Ayurveda formulation described for *Sarpavisha chikitsa*. The present review mentions its ingredients, traditional preparation method, Ayurvedic pharmacological properties and modes of administration based on the literature.

The formulation represents an area of traditional knowledge that merits systematic scientific investigation. Further research is needed to establish its composition, standardisation, safety and possible biological activity, followed by appropriately designed studies to assess its clinical relevance.

A careful integration of classical textual knowledge with modern toxicological research may help clarify the potential role of *Shirishapushpadi yoga* while maintaining patient safety as the primary consideration in snakebite management.

Ethical approval: Not applicable

Conflicts of interest: None

Source of funding: None

Acknowledgement: None

REFERENCES

1. World Health Organisation, snake envenoming available from-<https://www.who.int/news-room/Factsheets/detail/snakebite-envenoming> (cited-17/10/26)
2. Menon JC, Bharti OK, M S A, et al. Cross-sectional survey of the incidence, mortality and socioeconomic burden of snakebite envenoming in India. *Nat Commun*.2025;16:9871. doi:10.1038/s41467-025-64849-2.
3. Vāgbhaṭa. Aṣṭāṅgasamgraha, with the Śaśilekhā Sanskrit commentary of Indu, edited by Shivprasad Sharma. Varanasi: Chowkhamba Sanskrit Series Office; 2008. Uttaratanttra, Chapter 42, Verse 21, p. 868.
4. Vāgbhaṭa. Aṣṭāṅgaḥṛdaya, with the commentaries Sarvāṅgasundarā of Aruṇadatta and Āyurvedarasāyana of Hemādri. Annotated by Anṇā Moreśwar Kuṇṭe and Kṛṣṇa Rāmchandra Śāstrī Navre. Edited by Hari Sadāśiva Śāstrī Parāḍakara. Varanasi: Chaukhambha Sanskrit Sansthan; 2011. Uttara Sthana, Chapter 35, Verse 72, p. 912.
5. Agniveśa. Charaka Samhita, revised by Charaka and Dridhabala, with the Ayurveda-Dipika commentary of Chakrapanidatta. Edited by Jadavaji Trikamji Acharya. Varanasi: Chaukhambha Prakashan; 2013. Chikitsa Sthana, Chapter 23, Verse 193, p. 580.
6. Hegde PL, A Harini, A Textbook of Dravyaguna Vijnana. Revised ed., New Delhi: Chaukhambha Publications, 2022; Vol. 2: p. 646
7. Hegde PL, A Harini, A Textbook of Dravyaguna Vijnana. Revised ed., New Delhi: Chaukhambha Publications, 2022; Vol. 2: p. 655
8. Vagbhata. Ashtanga Hrdayam: Text, English translation, notes, appendices and indices. Vol. III: Uttara Sthana. Translated by K. R. Srikantha Murthy. Varanasi: Krishnadas Academy; 1995. Chapter 36, verse 72, p. 354
9. Amog PU, Manjuprasanna VN, Yariswamy M, Nanjaraj Urs AN, Joshi V, Suvilesh KN, et al. Albizia lebbeck seed methanolic extract as a complementary therapy to manage local toxicity of Echis carinatus venom in a murine model. *Pharm Biol*. 2016;54 (11):2568-74. doi:10.3109/13880209.2016.1171882.
10. Goudra M, Biradar MH, Pujari V, Benakatti V. A preliminary phytochemical analysis of different parts of Shirisha (Albizia lebbeck (L.) Benth.) with special reference to Vishaghna Karma. *Journal of Ayurveda and Integrated Medical Sciences*. 2025;10 (6). doi:10.21760/jaims.10.6.12.
11. Samant SS, Jagtap VA, Kalangutkar P, Morye R, Gadekar A, Rane R, et al. Phytochemistry and therapeutic uses of Albizia lebbeck. *Int J Herb Med*. 2023;11 (5):22-26. doi:10.22271/flora.2023. v 11. i5a. 884.
12. Adeyi AO, Ajisebiola BS, Adeyi EO, Alimba CG, Okorie UG. Antivenom activity of Moringa



oleifera leaf against pathophysiological alterations, somatic mutation and biological activities of *Naja nigricollis* venom. *Sci Afr.* 2020;8: e00356. doi:10.1016/j.sciaf.2020.e00356

13. Anand A, Alam F, Roy S, Goswami C. Phytochemicals and health benefits of *Moringa oleifera*: a comprehensive review. *Int J Pharm*

Sci. 2025;3 (6):3525-3537. doi:10.5281/zenodo.15719540.

HOW TO CITE: Aishwarya Mallasure, Rakshith N. N., Anjana R. Nath, Shirishapushpadi Yoga in Sarpa Visha: A Review, *Int. J. Sci. R. Tech.*, 2026, 3 (10), 1479-1483. <https://doi.org/10.5281/zenodo.23834813>