



**Review Article**

**A BRIEF REVIEW ON TEJOVATI (*ZANTHOXYLLUM ARMATUM*.DC.) IN VEDAS AND SAMHITA:  
AN ETHNOMEDICINALLY RICH PLANT**

**Deeksha<sup>1\*</sup>, D.C Singh<sup>2</sup>, Kiran Vashisht<sup>3</sup>, Rishi Arya<sup>3</sup>**

<sup>1</sup>PG Research scholar, <sup>2</sup>Professor, <sup>3</sup>Assistant Professor, Dept of Dravyaguna, Main campus, UAU, Dehradun, India.

**Article info**

**Article History:**

Received: 28-03-2022

Revised: 10-04-2022

Accepted: 18-04-2022

**KEYWORDS:**

*Tejovati, Veda, Samhitas, Nighantus, Synonyms, Ganas.*

**ABSTRACT**

Medicinal plants are considered as a rich resources of ingredients which can be used in drug development either pharmacopoeial, non- pharmacopoeial or synthetic drugs. A part from that, these plants play a critical role in the development of human cultures around the world. Traditional Indian medicine (Ayurveda) is becoming increasingly popular, with many chronic conditions responding to it well. Most patients begin to take conventional medications as soon as their diagnoses are made, so Ayurvedic treatments are usually undergone alongside and/or after conventional medical approaches. WHO (World Health Organization) estimated that 80 percent of people worldwide rely on herbal medicines for some aspect of their primary health care needs. According to WHO, around 21,000 plant species have the potential for being used as medicinal plants. Elaborate description of the plant and its therapeutic action are explained by our Acharyas in *Vedas, Puranas*, and *Samhitas* and in the later *Nighantus*. *Tejovati* is such a drug which is widely available and is having many mentioning in the classics for its effectiveness in many diseases. *Tejovati* does not have any controversies in any of the literatures or classics regarding its identification or usage. The current article is to highlight the importance of drug and references has been collected from *Vedas, Puranas, Samhita kala, Nighantu kala*. Synonyms, *Gana Varga*, Vernacular names etc has been collected and arranged systematically.

**INTRODUCTION**

*Tejovati* is an armed, scandent or erect shrub or a small tree, 6 m. tall or more, with dense foliage, found in the hot valleys of the Himalayas from Jammu to Bhutan at altitudes of 1,000-2,100 m., in Khasi hills at 600-1,800 m., and in the Eastern Ghats in Orissa and Andhra Pradesh at 1,200m, it is also sometimes planted for hedges in Assam. Branches armed, the prickles flattened, up to 2 cm. long; bark pale brown, deep-furrowed; leaves imparipinnate or trifoliolate, 5-23 cm. long, often with flattened prickles: leaflets upto 5 pairs, opposite, ovate to lanceolate, entire to glandular-crenate, acute to obtusely acuminate; flowers green or yellow, in dense terminal, and occasionally axillary sparse panicles;

follicles generally reddish, sub-globose, glabrous; seeds solitary in a fruit, globose, shining black. The bark, fruits and seeds are extensively used in indigenous system of medicine as a carminative, atomachic and anthelmintic.

The bark is pungent and used to clean teeth. The fruits and seeds are employed as an aromatic tonic in fever and dyspepsia. An extract of the fruits is reported to be effective in expelling roundworms. Because of their deodorant, disinfectant and antiseptic properties, the fruits are used in dental troubles, and their lotion for scabies.

**Table 1: Showing Botanical description of *Tejovati*<sup>[1]</sup>**

Kingdom	Plantae
Subkingdom	Viridiaeplantae
Class	Magnoliopsida
Subclass	Rosidae
Order	Rutales
Family	Rutaceae

Access this article online

Quick Response Code



<https://doi.org/10.47070/ijapr.v10i4.2319>

Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)

Genus	Zanthoxylum
Species	Z. alatum

**Table 2: Showing Vernacular Name of *Tejovati***

Sanskrit	Tejovha
Assamese	Kulekhara
Bengali	Tejovati
Gujrati	Tejabala, Tejbal
Hindi	Tejbal
Kannada	Tejapatri, Jimmi, Tumbura, Tumburudra, Tejovanti
Malayalam	Thumboonal, Thumbooni, Valiyavaluzhavam
Marathi	Tejabal
Tamil	Thejyovathi
Urdu	Kabab-e-Khandan

**Binomial Name****Scientific name:** *Zanthoxylum aramatum* D.C**Family:** Rutaceae**Classical Categorization***Caraka Samhita: Shirovirechan dravya*<sup>[2]</sup>, *Katu skanda*<sup>[3]</sup>, *Tikta skanda*<sup>[4]</sup>*Susruta Samhita: Dantashodhan*<sup>[5]</sup>*Astang Samgraha: Katu skanda*<sup>[6]</sup>**Distribution**<sup>[7]</sup>

Distributed in the hot valleys of the sub-tropical Himalayas as from Jammu to Bhutan including Kumaon, Punjab between 1000 -2100m, in Khasi hills between 500-1800m altitude and along Eastern Ghats in Orissa and Andhra Pradesh at 1200m altitude. It is also grown as hedge in Assam and other states. Distributed in Trans-Indus and Bhutan

**Botanical Description**<sup>[8]</sup>

**a) Leaf:** Imparipinnate or trifoliolate, 5-23cm. long, often with flattened prickles: leaflets upto 5 pairs, opposite, ovate to lanceolate, entire to glandular-crenate, acute to obtusely acuminate.

**b) Bark:** Bark corky, channelled and single quilled with large marks of tubercular prickles; 0.1-0.2cm thick, external surface pale brown, rough with numerous scattered patches of lenticels, rather deeply furrowed, internal surface smooth, light yellow to pale brown, fracture, short, odour, aromatic, taste, aromatic pungent.

**c) Flower:** Green or yellow, in dense terminal, and occasionally axillary sparse panicles

**d) Fruit-** Sub-globose to ovoid, trilocular, valvate capsule, 4 to 5mm in diameter, frequently dehiscent half-way into two carpels, each with 2 loculi, exposing a solitary seed, surface rough, covered with compactly packed prominent spherical oily tubercles, apex is pointed, base rounded attached with short 1 to 2 mm long pedicel, outer surface dark brown, inner pale brown, exhibiting papery .

**e) Seed:** Seeds solitary in a fruit, globose, shining black

**Chemical Constituents****Bark**<sup>[9]</sup>

Asarinin, fargesin, Dictamnine, 8-hydroxydictamnine, armatamide (amide), epiudesmine, eudesmine,  $\beta$ -sitosterol, (+) sesamin, (-) sesamin, Pluviatide, Lupeol, Vanillic acid, Zanthonitrile, berberine

**Fruits**

Linalool, linalyl acetate, citral, geraniol, methyl cinnamate, limonene, sabinene.

**Leaves**

Methyl-n-nonyl ketone, linalool, uncharacterized sesquiterpenes, tricosane (Wealth of India, 1998).

**Carpels**<sup>[10]</sup>

Carpels of the fruits yield an essential oil isomeric with turpentine having eucalyptus like odour & properties .

**Seeds**

The essential oil of comprises of over 85% of hydrocarbon 1- $\alpha$ -phellandrene and linalool, an unidentified sesquiterpene in little quantities. Ramidi and Ali, 1998, isolated tambulin (flavonoid) from the seed.

**Plant Oil-** Hydrocarbon, acid, phenol, 1, 8cineole, limonene, citronellal

**Table 3: Different species of *Tejovati* mentioned in Indian Medicinal Plants an Illustrated Dictionary by C.P. Khare (Ed.)**

S.no	Scientific Name	Uses	Chemical Constituent
1.	<i>Zanthoxylum acanthopodium</i> DC.	Seeds are used in the preparation of tooth powders.	Fruit - tambulin and tambuletin. Essential oil -d-linalool, dipentene+ phellandrene methyl cinnamate (6.2%)
2.	<i>Zanthoxylum americanum</i> Mill.	Used to treat rheumatism and toothache; circulatory insufficiency and fevers	Bark contains alkaloids gammafagarine, beta-fagarine, magnoflorine
3.	<i>Zanthoxylum budrunga</i> Wall. ex	Fruits- used for diarrhoea, dyspepsia; asthma, bronchitis;	The essential oil from the fruit contains l-sabinene, alphaterpinene, beta-

	DC	rheumatism; diseases of the mouth and teeth. The plant is used as one of the ingredients in the preparation of pharmaceutical tablets given to drug addicts for the treatment of withdrawal symptoms.	phellandrene, 1, 4-cineole, decanal, octanal, terpinenol, dihydrocarveol, l-cryptone and cuminaldehyde.
4.	<i>Zanthoxylum oxyphyllum</i> Edgew.	Fruits- prescribed for dyspepsia, also for asthma, bronchitis, rheumatism and toothache	Root- Alkaloids, xanthoxyphyllin and corydine and a lactone 3, 5-bis furan.

**Table4: Different species of *Tejovati* mentioned in Agro dictionary of medicinal plant (Prajapati Narayan Das & Kumar U)**

S.no	Scientific Name	Uses
1	<i>Zanthoxylum nitidum</i> (Roxb.) DC.	A powder made from the fruit is used to treat snakebite. The fruit is also used as a spice. Topical application of an alcoholic maceration of the fruit is effective against toothache.
2	<i>Zanthoxylum ovalifolium</i> Wight	Toothache
3	<i>Zanthoxylum oxyphyllum</i> Edgew	Fruits employed as a condiment in curries. Bark stimulant, stomachic, digestive.
4	<i>Zanthoxylum tetraspermum</i> Wight & Arn.	Stimulant, astringent, and digestive properties and used in dyspepsia and diarrhoea

#### Ayurvedic Properties<sup>[11]</sup>

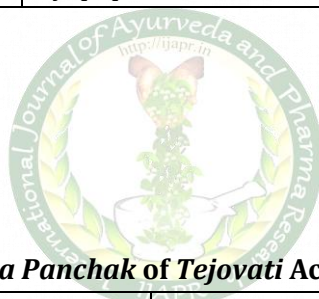
Rasa- Tikta, Katu

Guna- Laghu, Tikshna, Ruksha

Veerya- Ushna.

Vipaka- Katu

Doshagnata- Kaphavatashamaka



**Table 5: Showing the Rasa Panchak of *Tejovati* According to Different Texts**

S.no	Granthadhara	Rasa	Guna	Veerya	Vipak
1.	<i>Charak Samhita</i>	Katu, Tikta	-	-	-
2.	<i>Dhanvantri Nighantu</i>	-	Tikshan	Ushna	Katu
3.	<i>Madanpala Nighantu</i>	Katu, Tikta	-	Ushna	-
4.	<i>Kaiyadeva nighantu</i>	Katu, Tikta	-	Ushna	-
5.	<i>Bhavprakash Nighantu</i>	Katu, Tikta	Laghu, Ruksha, Tikshan, Vidhai	Ushan	Katu
6.	<i>Raj Nighantu</i>	Madhur, Tikta	-	Ushan	Katu
7.	<i>Dravyaguna sangrah</i>			Ushan	
8.	<i>Nighantu Adarsh</i>	Katu, Tikta	-	Ushan	Katu
9.	<i>Abhidhan ratna mala</i>		-	-	-
10.	<i>Shodhal Nighantu</i>	-	-	Ushan	-
11.	<i>Priya Nighantu</i>	-	Tikshan	Ushan	Katu

#### Part Used

Stem bark and Fruit

**Table 6: Showing the traditional uses of *Zathoxylum alatum* DC. in different countries**

Country	Traditional uses	References
India	The seeds and the bark are used in the treatment of dyspepsia, fevers and cholera. Root, fruit, bark and leaf are used for catching the fish	Chopra et al., 1986; Mathur et al, 1961 <sup>12</sup>

Pakistan	The decoction of dried fruit is used as a spice. Powder of dried fruits of <i>Zanthoxylum alatum</i> , <i>Trachyspermum ammi</i> seeds, <i>Mentha longifolia</i> dried leaves and black salt is taken with water during indigestion and cholera. Twigs are used as toothbrush during toothache and gum problems.	Barkatullah and Hussain, 2009 <sup>13</sup> ; Abbasi et al., 2010 <sup>14</sup>
Nepal	Seed is used for flatulence, digestion and depression	Zaidi et al., 2009 <sup>15</sup>
Japan	The decoction of the fruit is used for abdominal pain. Berries are antispasmodic, carminative and used for rheumatism and skin diseases. Bark is used for diabetes, cholera and asthma. Pickles from the fruits are useful for cold and cough, tonsillitis, headache, fever, high altitude sickness, vertigo/dizziness, limbs numbness, diarrhea and dysentery. Powdered dried fruits are taken with hot water to cure dysentery, diarrhea and stomachache.	Baral and Kurmi, 2006 <sup>16</sup> ; Gevali and Awale, 2008 <sup>17</sup>
China	An infusion in vinegar is used to expel bugs or worms infecting ear. Plant lotion is used in the treatment of scabies	Roi and Jacques, 1955 <sup>18</sup>

**Dosage**<sup>[19]</sup>

- Fruit Powder- 1-3gm
- Bark- 1-2 gm
- Bark & Fruit Powder- 1-2gm;
- Stem bark- 10-20gm for decoction

**Contraindication**<sup>[20]</sup>: Hypersensitivity to the drug**Antidote**<sup>[21]</sup>- Badam rogan**Shelf Life**<sup>[22]</sup>- One year**IUCN Status**- Scars<sup>[23]</sup>, Vulnerable<sup>[24]</sup>**Threat**<sup>[24]</sup>- Over-exploitation**Propagation and Cultivation**

It is propagated through seeds. The plant is available in nature, hence not cultivated specifically.

**Substitutes and Adulterants**<sup>[23]</sup>

- *Zanthoxylum acanthopodium* DC
- *Z. rhetsa* DC
- *Z. limonella*

In South India fruits of *Zanthoxylum rhetsa* DC (Chir phal) are sold in the market and used as substitute**Detailed Description of Tejovati in Various Samhita, Chikitsa Grant and Vedas****In Vedas**The earliest known documentation of plant treatments in Indian literature is found in *Vedas*. Nearly 300 plants are described here, but *Tejovati* as a medicinal plant has not been described.**Tejovati in Samhita Granth**After the Vedic period comes the *Samhita* period. Extensive use of medicines started during this period and Ayurvedic treatment became prevalent in this country.**Charak Samhita (1000 B.C- 4<sup>th</sup> century A.D)**<sup>[25]</sup>It is the oldest *Samhita* among all the *Ayurvedic samhita granthas*. It is composed by *Maharshi Agnivesha* (1000 B.C), redacted by *Acharya Charak* (200B.C) and reconstructed by *Acharya Dridhabala* (4<sup>th</sup> century A.D).**Table 7: Tejovati and Tumburu in Charak Samhita**

S.no	Chapter Name	Indication	Formulation	Use	Reference
1.	<i>Apamarga tanduliya</i>	<i>Shirashula, Peenas</i>	<i>Shirovirechan dravya</i>	Internal	Ch.su.2/3
2.	<i>Aaraghvdhiya</i>	<i>Kushtha</i>	<i>Kusthadi lepa</i>	External	Ch.su.3/8
3.	<i>Rogabhisakjeetiya</i>	-	<i>Shirovirechan</i>	Internal	Ch.vi.8/151



			dravya		
4.	Rogabhisakjeetiya	-	Katu skandha	Both	Ch.vi. 8/142
5.	Rogabhisakjeetiya	-	Tikta skandha	Both	Ch.vi 8/143
6.	Kushthachikitsa	Kushtha	Tiktaikshwadi taila	External	Ch.chi.7/109
7.	Kushthachikitsa	Mandal kushtha	Kanakshiri taila	External	Ch.chi 7/113
8.	Rajayakshmachikitsa	Mukhavairasya	Kawal dharan	Internal	Ch.chi.8/137
9.	Arshachikitsa	Arsha	Dhoopan	external	Ch.chi.14/50
10.	Arshachikitsa	Arsha	Peya	Internal	Ch.chi.14/89
11.	Hikkaswaschikitsa	Hikka swas	Tejovatyadi ghruta	Internal	Ch.chi 17/142
12.	Trimarmiyachikitsa	Mukha roga	Pippalyadi choorna	Internal	Ch.chi26/188
13.	Trimarmiyachikitsa	Dantavesta	Tejovahadi churna	Internal	Ch.chi26/190
14.	Trimarmiyachikitsa	Danta, Mukha, Gala roga	Kalak churna	Internal	Ch.chi26/195
15.	Trimarmiyachikitsa	Kantha roga	Pathadi churna	Internal	Ch.chi26/199
16.	Trimarmiyachikitsa	Arochak	-	Internal	Ch.chi26/217
17.	Trimarmiyachikitsa	Karna shula	Hinguwadi tail	Internal	Ch.chi26/222
18.	Urusthambhachikitsa	Urusthambha	Vatsakadi lepa	External	Ch.chi27/54
19.	Shymatrivritkalpa	Virechan Shrestha	Nishotha yoga	Internal	Ch.k.7/15
20.	Shymatrivritkalpa	Shula	Trivritadimodak	Internal	Ch.k.7/54
21.	Trimarmiyasidhi	Aptantrak	Aptantraknashak kwath	Internal	Ch.si.9/18

**Bhela Samhita (600-1000 B.C.)**<sup>[26]</sup>- Bhela Samhita is composed by Acharya Bhela . He has mentioned Tejovati in combination with other drugs for internal as well as external application in Shotha, Gulma, Arochak.

**Table 8: The different formulations and indications of Tejovati**

S.no	Chapter name	Indication	Formulation	Use	Reference
1.	Gulma chikitsa	Gulma	Dadhik ghruta	Internal	B.S.5
2.	Prameha chikitsa	Shukla meha	-	Internal	B.S.7
3.	Shwathu chikitsa	Shotha	Ayorajiya rasayan	Internal	B.S.19
4.	Shiroroga chikitsa	Arochak	-	Internal	B.S.23
5.	Aptantrak chikitsa	Aptantrak,hridayaroga	Hinguwadi yoga	Internal	B.S.28

**Sushruta Samhita (1000 B.C- 5<sup>th</sup> Century A.D.)**<sup>[27]</sup>

The propounder of this Samhita was Bhagwana Kashiraja Divodasa Dhanwantri. This Samhita was written by Vriddha Sushruta (1000 B.C.). He was contemporary to Agnivesha. The treaty was revised by Sushruta in 2<sup>nd</sup> century A.D. and Nagarjuna in 5<sup>th</sup> century A.D.

**Table 9: The formulation of Tejovati described in Sushruta samhita**

S.no	Chapter Name	Indication	Formulation	Use	Reference
1.	Sadhyovran chikitsa	Vran shodhan	-	External	Su.chi.2/90
2.	Sadhyovran chikitsa	Vran shodhan	-	External	Su.chi.2/93
3.	Mahavata vyadhi	Aptantrak	-	Internal	Su.chi5/21
4.	Bhagandar chikitsa	Nadivran	-	External	Su.chi.8/43
5.	Kushtha chikitsa	Kushtha	-	External	Su.chi.9/10
6.	Mudhagarbha chikitsa	Yonishula	-	Internal	Su.chi.15/23
7.	Mukharoga chikitsa	Adhimansa	-	internal	Su.chi.22/24
8.	Anagatbadh pratishedha	Dantashodhan	Tejovati churna	Internal	Su.chi.24/8

9.	<i>Pratishya pratishedha</i>	<i>Pratishya</i>	<i>Mustadi kaval</i>	Internal	Su.U.24/36
10.	<i>Jwar pratishedha</i>	<i>Jeeran jwara</i>	<i>Ksheerivrikashadi taila</i>	External	Su.U.39/258
11.	<i>Atisara pratishedha</i>	<i>Aam atisara</i>	<i>Kalingaadi vinshati yoga</i>	Internal	Su.U.40/42
12.	<i>Gulma pratishedha</i>	<i>Vataj shula</i>	-	Internal	Su.U.42/70
13.	<i>Gulma pratishedha</i>	<i>Parshwa shula</i>	<i>Pushkarmooladi churna</i>	Internal	Su.U.42/120
14.	<i>Swasa pratishedha</i>	<i>Swasa</i>	<i>Talishadi ghritam</i>	Internal	Su.U.51/28

**Astang Sangrah (6<sup>th</sup> Century A.D)**<sup>[28]</sup>: *Ashtanga Samgraha* is written by Maharshi Vridha Vagbhata.

**Table 10: The formulations and indications of Tejovati according to Astang Sangrah**

S.no	Chapter Name	Indication	Formulation	Use	Reference
1.	<i>Shodhanadigana sangrahadhya adhya</i>	<i>Nasya</i>	-	Internal	A.S.SU14/5
2.	<i>Rasabhedhiya adhya</i>	-	<i>Katu skanda</i>	Internal	A.S.SU.18/23
3.	<i>Annaswarupa vigyaniyaadhya</i>	<i>Deepan, Rochan</i>	<i>Harit varga</i>	Internal	A.S.SU.7/154
4.	<i>Garbhavyapad adhya</i>	<i>Vedanasthapana</i>	<i>Katukadi churna</i>	Internal	A.S.SA.4/45
5.	<i>Balamaya pratishedham</i>	<i>Kshiralasaka</i>	<i>Vaman</i>	Internal	A.S.U.2/18
6.	<i>Balamaya pratishedham</i>	<i>Balasoosha</i>	<i>Lepa</i>	External	A.S.U.2/75
7.	<i>Mukharoga pratishedha</i>	<i>Jalarbuda</i>	<i>Churna</i>	Internal	A.S.U.26/8
8.	<i>Mukharoga pratishedha</i>	<i>Putimukha</i>	<i>Mukhashodhan churna</i>	Internal	A.S.U.26/61
9.	<i>Siro roga pratishedha</i>	<i>Krimij shirashula</i>	-	Internal	A.S.U.28/24
10.	<i>Ksudraroga pratishedha</i>	<i>Chippa/Kunakha</i>	-	External	A.S.U.37/48

**Ashtang Hridya (7<sup>th</sup> Cent A.D)**<sup>[29]</sup>- It was composed by Acharya Laghu Vagbhata.

**Table 11: The formulations and indications of Tejovati according to Ashtang Hridya**

S.no	Chapter Name	Indication	Formulation	Use	Reference
1.	<i>Swashidma chikitsa</i>	<i>Swasa</i>	<i>Tejovatyadi ghrita</i>	Internal	A.H.Chi.4/52
2.	<i>Arsha chikitsa</i>	<i>Arsha</i>	<i>Ghrita</i>	Internal	A.H.Chi.8/50
3.	<i>Gulma chikitsa</i>	<i>Gulma, Apasmar</i>	<i>Dadhika ghrita</i>	Internal	A.H.Chi.14/17
4.	<i>Kushtha chikitsa</i>	<i>Kushtha, Kotha</i>	<i>Nimbadi lepa</i>	External	A.H.Chi.19/65
5.	<i>Vatavyadhi chikitsa</i>	<i>Hridya roga</i>	<i>Kwatha</i>	Internal	A.H.Chi.21/36
6.	<i>Vatavyadhi chikitsa</i>	<i>Vatavyadhi</i>	<i>Nimbadi ghrita</i>	Internal	A.H.Chi.21/59
7.	<i>Vaman kalpaadhyaa</i>	-	<i>Kwatha</i>	Internal	A.H.K.1/38
8.	<i>Karnaroga pratishedha</i>	<i>Karna shula</i>	-	Internal	A.H.U.18/15
9.	<i>Mukharoga pratishedha</i>	<i>Adhimansa</i>	<i>Kawal dharan</i>	Internal	A.H.U.22/38
10.	<i>Mukharoga pratishedha</i>	<i>Dantamansa kandu paka</i>	<i>Pathadi manjan</i>	Internal	A.H.U.22/98
11.	<i>Mukharoga pratishedha</i>	<i>Mukha danta gala vikar</i>	<i>Kalak churna</i>	Internal	A.H.U.22/99

**Kashyap Samhita (600 B.C- 7<sup>th</sup> Century A.D)**<sup>[30]</sup>- also known as *Vridha Jivak Tantra*, *Kashyap Samhita* was composed by Maharshi Kashyap and recomposed by Acharya Vatsya. This *Samhita* is not found in complete form now days. This treaty mainly deals with pediatric disorders.

**Table 12: The formulations and indications of Tejovati according to Kashyap Samhita**

S.no	Chapter Name	Indication	Formulation	Use	Reference
1.	Balagrah chikitsa	Revati graha	Medicated oil	External	Ka .Chi.4/23.1
2.	Visheshakalpaadhya	Fever	Katuka sarpi	Internal	Ka .Ka.8/144
3.	Visarpa chikitsa	Kaphaj visarpa	Vaman yoga	Internal	Ka.Khi.14/66.1
4.	Shula chikitsa	Vataj shula	Pinda sweda	External	Ka.khi .18/10.2

**Sharangdhara Samhita (13<sup>th</sup> Century A.D)**<sup>[31]</sup>- The Samhita is composed by Acharya Sharangdhara. This Samhita has been divided into Purva, Madhyam, and Uttar khanda, which deals with description of diseases, Panchvidha kashaya kalpana, drug actions and treatment of ailments respectively. The different formulation of Tejovati is given below in tabulated form.

**Table 13: The formulations and indications of Tejovati according to Sharangdhara Samhita**

S.no	Chapter Name	Formulation	Indication	Use	References
1.	Churna Kalpana	Lavantrikadya ghritam	Yakritpliha shula	Internal	SH.M.6/102
2	Gutika Kalpana	Shri bahushal guda	Arsha	Internal	SH.M.7/10
3.	Sneha Kalpana	Hinguvadhyam tail	Karnashula	Internal	SH.M.9/172

**Bhavprakash Samhita (16<sup>th</sup> Century A.D)**<sup>[32]</sup>- This Samhita was composed by Acharya Bhavamishra. The different formulations and indications of Tejovati are given below in the tabular form.

**Table 14: The formulations and indications of Tejovati according to Bhavprakash Samhita**

S.no	Chapter Name	Formulation	Indication	Uses (Int./Ext.)	References
1.	Arshoadhikar	Bahusaal guda	Arsha	Internal	B.P. M.5/85
2.	Shulaadhikar	Churna	Shula, Gulma	Internal	B.P. M 30/45
3.	Bhagandaradhikar	Kalka	Bhagandar	External	B.P M.50/25
4.	Mukharogaadhikar	-	Sheetada	Internal	B.P M. 66/39
5.	Mukharogaadhikar	-	Adhimansa	Internal	B.P M. 66/53
6.	Mukharogaadhikar	-	Kaphaj galaroga	Internal	B.P M. 66/144
7.	Mukharogaadhikar	-	Galaroga	Internal	B.P M.66/146
8.	Yonirogadhikar	-	Makkalshula	Internal	B.P M. 70/144

### Tejovati in Chikitsa Grantha

**Chakradutta (11<sup>th</sup> Century A.D)**<sup>[33]</sup> - Chikitsa grantha Chakradutta was composed by Acharya Chakrapani Dutta. It is the oldest Samhita. The Samhita contain many formulations to cure disease. The formulations and indications of the compendium are given below.

**Table 15: The formulations and indications of Tejovati according to Chakradutta**

S.no	Chapter Name	Indication	Use	Reference	Formulation
1.	Grahnirogaadhikar	Grahni	Internal	C.D 4/65	Aayamkanjikam
2.	Arshaadhikar	Arsha	Internal	C.D 5/78	Bahusalguda
3.	Hikkashwasadhikar	Shwas	Internal	C.D 12/21	Tejovatyadighritam
4.	Arochakadhikar	Aaruchi	Internal	C.D 14/5	Aruchaknirasnoupay
5.	Shooladhikar	Vataj shoola, Gulma	Internal	C.D 26/6	-
6.	Shooladhikar	Shoola	Internal	C.D 26/38	-
7.	Plihaadhikar	Pliharoga	Internal	C.D 37/35	Maharohitakam ghritam
8.	Bhagandaradhikar	Bhagandara	External	C.D 45/6	Kalka
9.	Bhagandaradhikar	Bhagandara	Internal	C.D 45/15	Saptavinshitko guggulu
10.	Kushthaadhikar	Kushtha	Internal	C.D 49/121	Panchatikta guggulu
11.	Mukharogaadhikar	Dantashishira roga	External	C.D 55/24	Lepa
12.	Mukharogaadhikar	Gala roga	Internal	C.D 55/72	Kalaka choorna

13.	Mukharogaadhikar	Kantha roga	Internal	C.D 55/77	Kshargutika
14.	Karnarogaadhikar	Karna shola	Internal	C.D 56/16	Deepika taila

**Yogratnakara (17<sup>th</sup> Century A.D)**<sup>[34]</sup>- The *Chikitsa grantha "Yoga Ratnakara"* was composed by *Vaidya Shri Laxmipati Ayurvedacharya*. The formulations and indications of *Tejovati* are given below in tabular form.

**Table 16: The formulations and indications of *Tejovati* according to *Yogratnakara***

S.no	Chapter Name	Formulation	Indication	Use	Page no.
1.	Jwara chikitsa	Shringyadi kwath	Visham jwar	Internal	
2.	Arsharoga chikitsa	Bahushal guda	Arsha	Internal	302
3.	Swasa chikitsa	Shatyadi churna	Swas, kasha	Internal	433
4.	Arochak chikitsa	Kusthaadi kawal	Arochak	Internal	442
5.	Vatavyadhi nidan	Dvyatrinshak guggulu	Vata vyadhi	Internal	528
6.	Vatavyadhi nidan	Mahalaxmi Narayan tail	Vata vyadhi	External	537
7.	Shula chikitsa	Tumburuadi churna	Shula, Anaha	Internal	Utradha -8
8.	Gulma chikitsa	Hingu navak	Shula	Internal	35
9.	Gulma chikitsa	Hinguvadi ghrita	Gulma	Internal	41
10.	Agnidagdhā nidan	Saptavinshati guggulu	Agnivran	Internal	186
11.	Shitapita nidan	Kushthadi churna	Kandu	External	236
12.	Dantaroga chikitsa	Kushthadi churna	Dantagat Rakta srav	External	303
13.	Mukharoga chikitsa	-	Kaphaj galaroga	Internal	306
14.	Mukharoga chikitsa	Yavagrjadi vati	Galaroga	Internal	306
15.	Karnaroga chikitsa	Chatwari tail	Karan shula	Internal	314

**Bhaisajya Ratnawalli (18<sup>th</sup> Century A.D)**<sup>[35]</sup> *Chikitsa Grantha* was composed by *Shri Govind Das Ji*. The formulations and indications of *Tejovati* are given below in the tabular form. [Table No. 17]

**Table 17: The formulations and indications of *Tejovati* according to *Bhaisajya Ratnawalli***

S.no	Chapter Name	Indication	Use	Formulation	Reference
1.	Grahaniroga adhikar	Grahni	Internal	Lavangadi churna	Bh.R. 8/66
2.	Arsharoga adhikar	Arsha	Internal	Bahushal guda	Bh.R. 9/121
3.	Arochalroga adhikar	Aruchi	Internal	-	Bh.R. 18/61
4.	Arochalroga adhikar	Aruchi	Internal	Sulochanabhra rasa	Bh.R. 18/47
5.	Shoolaroga adhikar	Shoola, Gulma	Internal	Tumbruwadi churna	Bh.R 30/10
6.	Shoolaroga adhikar	Shoola	Internal	Hinguwadi churna	Bh.R 30/77
7.	Gulmaroga adhikar	Gulma	Internal	Hinguwadi churna	Bh.R 32/4
8.	Plihayakritroga adhikar	Plihavridhhi	Internal	Rohitak ghrita	Bh.R41/2197
9.	Bhagandarroga adhikar	Bhagandar, Nadivrana	External	Rasanjandi lepa	Bh.R 51/9
10.	Bhagandarroga adhikar	Arsh	Internal	Saptavinshiti guggulu	Bh.R 51/29
11.	Kushtharoga adhikar	Kustha	Internal	Panchatikta ghrita guggulu	Bh.R 54/229
12.	Kushtharoga adhikar	Kustha	Internal	Kandarp sara taila	Bh.R 54/344
13.	Mukha roga adhikar	dantashoola	Internal	Kushthadi churna	Bh.R 61/10
14.	Mukha roga adhikar	Adhimansa	Internal	Pathadi churna	Bh.R 61/25
15.	Mukha roga adhikar	Kantharoga	Internal	Yavaksharadi vati	Bh.R 61/68
16.	Mukha roga adhikar	Galaroga	Internal	Kalaka churna	Bh.R 61/87
17.	Karna roga adhikar	Karnashoola	Internal	Hinguwadi tail	Bh.R 62/14



**Table 18: Showing Classification of Tejovati in Various Nighantus**

S.no	Text	Varga	References
1.	<i>Bhavprakash nighantu</i> <sup>36</sup>	<i>Haritkiyadi varga</i>	Sloka no 169-170
2.	<i>Dhanvantri nighantu</i> <sup>37</sup>	<i>Shatpushpadi varga</i>	Sloka no.13
3.	<i>Raj nighantu</i> <sup>38</sup>	<i>Aamraadi</i>	Sloka no.184-185
4.	<i>Kaiyadeva nighantu</i> <sup>39</sup>	<i>Aushadhi varga</i>	Sloka no.1036-1040
5.	<i>Hridyadeepak</i>	<i>Ekpada varga</i>	Sloka no. 98
6.	<i>Shodhal nighantu</i> <sup>40</sup>	<i>Shatpushpadi varga</i>	Sloka no 246
7.	<i>Priya nighantu</i>	<i>Haritkiyadi varga</i>	Sloka no. 57
8.	<i>Madanpal nighantu</i> <sup>41</sup>	<i>Abhyaadi varga</i>	Sloka no.189-190
9.	<i>Nighantu shesha</i> <sup>42</sup>	<i>Gulmakanda</i>	Sloka no. 277-278
10.	<i>Gunaratna mala</i>	<i>Haritkiyadi varga</i>	Page no.53
11.	<i>Abhidhan ratnamala</i>	<i>Tikta skanda</i>	Sloka no. 123
12.	<i>Shankar nighantu</i>	<i>Eknama varga</i>	Sloka no. 119

**Table 19: Classification According to Ayurvedic Text**

<i>Karyakaran bheda</i>	<i>Karya dravya</i>
<i>Chetanachetan bheda</i>	<i>Chetan dravya</i>
<i>Aharaushadha bheda</i>	<i>Aushadha</i>
<i>Yoni bheda</i>	<i>Oudhbhida</i>
<i>Rasa bheda</i>	<i>Katu, Tikta</i>
<i>Veerya bheda</i>	<i>Ushna</i>
<i>Vipak bheda</i>	<i>Katu</i>
<i>Dosha bheda</i>	<i>Kapha-Vata shamak</i>

**Table 20: Formulation**

<i>Panchatikta Guggulu Ghrita</i>	<i>Panchatiktaghrita guggulu</i>
<i>Tumburvadi churna</i>	<i>Tejovatyadi ghrita</i>
<i>Kalaka Churna (Lepa)</i>	<i>Kalak churna lepa</i>
<i>Tiktekshvakadi taila</i>	<i>Kanakakshiri taila</i>

**CONCLUSION**

*Tejovati (Zanthoxylum armatum DC.)* is a plant with a rich ethnobotanical history. The present review on *Tejovati* from different classical texts and *Nighantus* can be useful to know about the different useful parts, therapeutic uses, formulations, synonyms etc of the plant. By this way we can use *Tejovati* in various disease conditions. In this regard further researches are to be carried out to explore *Tejovati* for its potency towards pharmacological properties and actions.

**Acknowledgment**

I extend my sincere gratitude towards Rishikul Campus, Haridwar, for granting permission and supporting me. My sincere thanks to Dr.D.C.Singh for her motivation and inspiration and giving guidelines for the study

**REFERENCES**

1. Medhi, K., Deka, M., and Bhau, B. S., (2013), The Genus *Zanthoxylum* - A Stockpile of Biological and Ethnomedicinal Properties, *Omics*. 2(3), pp. 697-704
2. Acharya Agnivesha, *Charak Samhita*, Vol. I Sutrasthan (2/3) with elaborated Vidyotini Hindi Commentary, Edited by Pt. Kashinatha Shastri and Dr. Gorakhnath Chaturvedi, Published by Chaukhamba Bharati Academy, Varanasi, Edition: 2012
3. Acharya Agnivesha, *Charak Samhita*, Vol. I vimanstan (8/142) with elaborated Vidyotini Hindi Commentary, Edited by Pt. Kashinatha Shastri and Dr. Gorakhnath Chaturvedi, Published by Chaukhamba Bharati Academy, Varanasi, Edition: 2012.

4. Acharya Agnivesha, Charak Samhita, Vol. 1vimansthan (8/143) with elaborated Vidyotini Hindi Commentary, Edited by Pt. Kashinatha Shastri and Dr. Gorakhnath Chaturvedi, Published by Chaukhamba Bharati Academy, Varanasi, Edition: 2012
5. Sushruta Maharsi, Sushruta samhita, Vol. I Chikitsasthan (24/8) Ayurveda-Tatva-Sandipika, Hindi Commentary, Edited by Kaviraja Ambikadutta Shastri, Chaukhamba Sanskrit Sansthan, Edition: 2012
6. Acharya Vagbhata, Astanga Samgraha Sutrasthan 18/23, Translated by Prof. K.R. Srikantha Murthy, Vol. I, Chaukhambha Orientalia, Varanasi, Edition: 2005
7. Data Base On Medicinal Plants Used In Ayurveda, Vol-7, Edition-2005, Published by CCRAS New Delhi,
8. The Wealth of India: A Dictionary of Indian Raw Materials & Industrial Products, Raw Materials. New Delhi, India: CSIR Publications; 1988
9. Kalia, N. K., Singh, B., and Sood, R. P., (1999), A New Amide from Zanthoxylum armatum, J. Nat. Prod., 62(2), pp. 311-312
10. Nadkarni, K. M., (2002), Indian Material Medica, Vol. 1, Bombay Popular Prakashan, Bombay, India
11. Data Base On Medicinal Plants Used In Ayurveda, Vol-7, Edition- 2005, Published by CCRAS New Delhi, P
12. Chopra, R. N., Nayar, S. L., Chopra, I. C, Asolkar, L. V., and Kakkar, K. K., (1986), Glossary of Indian Medicinal Plants (Including supplement), Council of Scientific and industrial Research, New Delhi, India
13. Barkatullah, I. M., and Hussain F., (2009), Ethanobotanical studies of plants of Charkotli Hills, Batkhela District, Malakand, Pakistan, Front. Biol. China., 4(4), pp. 539-548
14. Zaidi, S. F. H., Yamada, K., Kadowaki, M., Usmanghani, K. and Sugiyama, T., (2009), Bactericidal activity of medicinal plants, employed for the treatment of gastrointestinal ailments, against Helicobacter pylori, J. Ethanopharmacol, 121, pp. 286-291.
15. Baral, S. R., and Kurmi, P. P., (2006), A compendium of medicinal plants in Nepal, Mrs Rachna Sharma Publication, Kathmandu, Nepal
16. Gevali, M. B., and Awale, S., (2008), Aspects of Traditional Medicine, Medicine University of Toyama, Japan
17. Jacques Roi, S. J., Le P., (1955), Traite des plantes medicinales chinoises, Paris, Lechevalier
18. Data Base On Medicinal Plants Used In Ayurveda, Vol-7, Edition-2005, Published by CCRAS New Delhi,
19. Healing herbs of Himalayan- Department of AYUSH, Ministry of health & family welfare, Government of India, page no.131
20. Shankar Nighantu by Rajvaidya p. Shankar datta Goda
21. Medicinal plant of Himalaya by Gyanendra pandey
22. Healing herbs of Himalayan- Department of AYUSH, Ministry of Health & Family Welfare, Government of India, Page no. 131
23. Bhatt Deepika et al, traditional medicinal systems and threatened medicinal plants of kumaun, western Himalaya, India, edition 2020, Indu Biik services pvt, ltd, Daryaganj, New Delhi, Page no. 109
24. Data Base On Medicinal Plants Used In Ayurveda, Vol-7, Edition- 2005, Published by CCRAS New Delhi
25. Acharya Agnivesha, Charak Samhita, Vol. I and II with elaborated Vidyotini Hindi Commentary, Edited by Pt. Kashinatha Shastri and Dr. Gorakhnath Chaturvedi, Published by Chaukhamba Bharati Academy, Varanasi, Edition: 2012.
26. Acharya bhel, Bhel Samhita, Edited with Hindi commentary by Ab hay Katyayan, Chaukhambha Surbharati Prakasan, Edition: 2010
27. Sushruta Maharsi, Sushruta samhita, Vol. I and II Ayurveda-Tatva-Sandipika, Hindi Commentary, Edited by Kaviraja Ambikadutta Shastri, Chaukhamba Sanskrit Sansthan, Edition: 2012
28. Acharya Vagbhata, Astanga Samgraha, Translated by Prof. K.R. Srikantha Murthy, Vol. I, Chaukhambha Orientalia, Varanasi, Edition: 2005
29. Acharya Vagbhata, Astanga Hridayam, Translated by Prof. K.R. Srikantha Murthy, Vol. I to III, Chaukhambha Krishanadas Academy: Edition: 2014
30. Maharishi Maricha Kashyapa, Kasyapa Samhita or Vriddhajivaka Tantra, Edited by Prof. P.V. Tewari, Chaukhambha Visvabharati, Varanasi, Edition: 2002
31. Acharya Sharangadhar, Sarangadhar Samhita, Commentary by Dr. Smt. Shailaja Srivastava, Chaukhambha Orientalia, Varanasi, Edition: 2005
32. Acharya Bhavmisra, Bhavprakash Nighantu, Commentary by K.C. Chunekar, Chaukhambha Bharati Academy, Varanasi, Reprint Edition: 2015, Haritakyadi Varg, Pg. no. 184-185.
33. Acharya Chakrapanidutta. Chakradutta-Sanskrit Text with English Translation, edited and translated by P.V. Sharma. Varanasi, India; Chaowkhamba Orientalia; 2007

34. Vaidya Laxmipati Sastri, Yogaratnakara, Edited by Brahmasankar Sastri, Chaukhambha Prakashan, Varanasi, Edition: 2010
35. Kaviraj Govind Das Sen, Bhaisajya Ratnawali, Commentary by Prof. Siddhi Nandan Mishra, Chaukhambha Surbharati Prakashan, Varanashi, Edition: 2007
36. Acharya Bhavmisra, Bhavaprakasa, Edited by Pandit Shri Brahma Shankar Misra. Part II, Chaukhamba Sanskrit Sansthan, Edition: 2005
37. Dhanvantri Nighantu, e-Nighantu, Collection of Ayurvedic Lexicons, CCRAS, New Delhi, Edition: 2012, Shatpushpadi Varg
38. Dr.Indradeva Tripathi, Raj Nighantu, Chaukhambha Krishna das Academy, Edition: 2006, varg
39. Acharya P.V. Sharma & Dr. Guru Prasad Sharma, Kaideva Nighantu, Chaukhambha Orientalia, Edition: 2006, Varg,
40. Prof. Gyanendra Pandey, Shodhal Nighantu, Chaukhambha Krishnadas Academy, Edition: 2009, varga
41. Upadhaya Ramprasad Pandit, Madanpal Nighantu, Chaukhambha, Krishna das Academy, 1st Edition 1954, Abhyadi varga
42. Nighantu Sesha, e Nighantu, Collection of Ayurvedic Lexicons, CCRAS, New Delhi, Edition: 2012,

**Cite this article as:**

Deeksha, D.C Singh, Kiran vashisht, Rishi Arya. A Brief Review on Tejovati (Zanthoxylum Armatum.Dc.) in Vedas and Samhita: An Ethnomedicinally Rich Plant. International Journal of Ayurveda and Pharma Research. 2022;10(4):80-90.  
<https://doi.org/10.47070/ijapr.v10i4.2319>

**Source of support: Nil, Conflict of interest: None Declared**

**\*Address for correspondence**

**Dr. Deeksha**

PG Research Scholar,  
Dept of Dravyaguna, Rishikul  
Campus, UAU, Haridwar,  
Email id:

[drdeekshathadrak@gmail.com](mailto:drdeekshathadrak@gmail.com)

Ph: 9871375526

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.

