

**A LITERARY REVIEW OF NYCTANTHES ARBORTRISTISLINN  
(PARIJATHA) LINN IN AYURVEDIC CLASSICS**

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**ABSTRACT**

Ayurveda is a sea of knowledge. It explains not only curative aspect but also preventive aspect of health. Majority of the medicines mentioned in *Ayurveda* are plants based. While viewing this traditional knowledge we come across a number of wonderful herbal drugs beneficial in various ailments. *Parijatha* is one among this which holds greater importance in Ayurvedic classics. It is popularly called as night jasmine as well as Harsinghar in various regions. Broad spectrum medical use of the plant and its different parts are described in various Ayurvedic literatures. It has been reported to possess pharmacological actions like anti-inflammatory<sup>[8]</sup>, anti-diabetic<sup>[12]</sup>, antifungal, antimicrobial,<sup>[11]</sup> Hepatoprotective<sup>[13]</sup>, anti-pyretic,<sup>[9]</sup> anti-malarial<sup>[10]</sup>,

and anti-allergic<sup>[14]</sup> activities. The various Phytochemical constituents like flavanol glycoside, oleanic acid, essential oils, tannic acid, carotene, friedelin, lupeol, glucose, stearic, palmitic, myristic acids<sup>[15]</sup> and many others were identified in various parts of plant. *Nyctanthes arbortristis* is easily available plant, well known by common people and no special conditions are required for its collection and cultivation, hence I selected this plant for the literary review which will help the researchers of Ayurveda as well as in other field of bio-medical sciences to explore more therapeutic value of the said plant for the benefit of the public in larger extent.

**KEYWORDS:** *Nyctanthes arbortristis* Linn., *Parijatha*, Ayurveda, Phytochemicals, Pharmacological actions.

## INTRODUCTION

From the beginning of creation preservation of health has been instinctive necessity of human beings. Herbal treatment is the natural form of healing therapy to cure the diseases of mankind. Ayurveda has a holistic approach towards the overall health of an individual. While focusing treatment, it laid stress on various drugs of plant, animal and mineral in origin. In many wonderful herbal drugs, *Parijatha* is one of the fabulous herbal drug which is beneficial in many diseases.

*Nyctanthes arbortristis* Linn, belonging to the family *oleaceae*, known as *Parijatha* in Sanskrit and poulary known as *Harsinghar* in hindi. It is commonly called as Night jasmine in English, due to fact that its flowers emit a very strong and pleasant fragrance during whole night.<sup>[1,2]</sup> The generic name—*Nyctanthes* has been coined from two Greek words *\_Nykhta*‘ (night) and *\_Anthos*‘ (flowers).<sup>[3,4]</sup> The specific name *arbortristis* means Sad tree as it loses its brightness during daytime.<sup>[5]</sup> It is a large shrub or a small tree and the plant is well tolerated in large range of climatic conditions hence the plant extends from northern Pakistan and southern Nepal through northern India and south east to Thailand and also in other parts of the world.<sup>[6]</sup> It is also found in Indian gardens for ornamental purposes. Different parts of the plant such as leaves, fruits, flowers, stem and barks exhibit various pharmacological activities and is reported to have broad spectrum medicinal use such as anti- bacterial, anti-inflammatory, anti-pyretic and anti-malarial, anti-microbial, anti-diabetic effect. It has bitter taste and is traditionally used in various diseases like Spleen enlargement, Round Worm Infestation, Sciatica, Fevers, Bronchitis, Rheumatism.<sup>[15,16]</sup> In the present review, an attempt was made to focus on the the complete pharmacognostical study of the drug *Parijatha* such as origin of the drug, scientific nomenclature, geographical distribution, traditional uses, phytochemistry and various pharmacological actions mentioned in Ayurvedic and modern books.

### Etymology

“*Paarinaha Samudrath jaatho va parijatah*”<sup>[17]</sup>

It is called *Parijata*, because of it’s origin from *samudra* (Ocean) as a result of (*parinaha*) extensive searching.

### Mythological story of *Parijatha*

Mythological story reveals that, the drug *Parijata* is a heavenly tree brought to earth by Lord Krishna. It holds an elevated place in Indian mythology and the tree is said to be one of the

five trees (Panchavrikshas) that adorned Lord Indra's garden at Svargaloka (Heaven). The history of *Parijatha* is marvelously described in Vishnu Purana with reference to the story involving Lord Sri Krishna and his two wives. A quarrel over it ensued between Satyabhama and Rukmini, Krishna's wives. But Krishna planted the tree in Satyabhama's courtyard in a way, that when the tree flowered, the flowers fell in Rukmini's courtyard.

### **Morphology**

#### **Habit**<sup>[15,16]</sup>

It is a common wild hardy large shrub or small tree growing to 10 m tall, with flaky grey bark.

It has rough, tetragonal and scabrous spreading branches.

The leaves are opposite, simple, 6-12 cm long and 2-6.5 cm broad, with an entire margin and is scabrous above with bulbous based hairs and pubescent beneath.

The flowers are fragrant, with a five to eight lobed white corolla with an orange red centre, they are produced in clusters of two to seven together, with individual flowers opening at dusk and finishing at dawn.

The fruit is a flat brown heart-shaped to round capsule 2cm diameter, with two sections each containing single seed.

The tree begins to flower from late September onwards till December. Flowers open late in the evening.

#### **Habitat**

*Nyctanthes arbortristis* is native to the subtropical Himalayas of Nepal and India; it is more found in southern parts of India, and in South-East Asian country such as Thailand, Malaysia and Indonesia.<sup>[15,16]</sup>

#### **Propagation and cultivation**<sup>[15]</sup>

It is cultivated in gardens almost through out India up to an altitude of 1500metres for its fragrant flowers. In Natural habitat it grws fast on dry steep hill sides and rocky gardens. It can be propagated by seeds or seedlings. The plant grows well in various types of soil and climatic conditions.

**Table no 1: Classical Categorization of *Parijata*(*Nycanthes arbortristis linn*) according to different Nighantus.**

Classical Text	Gana/Varga/Other
HridayadeepakaNighantu <sup>[18]</sup>	Ekapadavarga
BhavaprakashaNighantu <sup>[19]</sup>	GuduchyadiVarga
SaraswathiNighantu <sup>[20]</sup>	KsupadiVarga
Saligrama nighantu <sup>[21]</sup>	Puspa varga
Nighantu Adarsh <sup>[17]</sup>	Jatyadi varga
PriyaNighantu <sup>[22]</sup>	HarithakyadiVarga

**Table no 2: Synonyms of *Parijata*(*Nycanthes arbortristis linn*) according to different Nighantus.**

S.No	Name	Bhavaprakasha <sup>[19]</sup>	Priya <sup>[22]</sup>	Saraswathi <sup>[20]</sup>
1.	<i>Sephalika</i>	+		+
2.	<i>Sephali</i>		+	
3.	<i>Harsinghar</i>		+	
4.	<i>Suvaha</i>			+
5.	<i>Tamravrintika</i>			+
6.	<i>Nimbataru</i>	+		
7.	<i>Parijata</i>	+		
8.	<i>Paribhadra</i>	+	+	
9.	<i>Mandara</i>	+		
10.	<i>Kantaki</i>		+	
11.	<i>Raktapuspa</i>			
12.	<i>Kharapatra</i>			

**Table no 3: Properties of *Parijata*(*Nycanthes arbortristis linn*) according to various texts.**

S.No	Name	Rasa	Guna	Veerya	Vipaka
1.	<i>Bhavaprakash<sup>[19]</sup></i>	<i>Tikta</i>	-	-	-
2.	<i>Saligrama<sup>[21]</sup></i>	<i>Tikta</i>	-	-	-
3.	<i>Nighantu Adrash<sup>[17]</sup></i>	<i>Tikta</i>	-	<i>Seta</i>	<i>Katu</i>
4.	<i>Priya<sup>[22]</sup></i>	<i>Tikta</i>	-	<i>Ushna</i>	-
5.	<i>Data base of Medicinal plants<sup>[15]</sup></i>	<i>Tikta</i>	<i>Laghu,Ruksha</i>	<i>Ushna</i>	<i>Katu</i>

**Table no 4: Karma and Indications of *Parijata* (*Nycanthes arbortristis linn*) according to various authors.**

Classical Text	Karma	Indication
Bhavaprakasha Nighantu <sup>[19]</sup>	<i>Jwaraghna, Yakrit, Uttejak, Mriduvirecak, Krimighna</i>	<i>Ghridrasi, Vishajwara, krimi.</i>
Saligrama nighantu <sup>[21]</sup>	<i>Sothahara, Medanasaka and Kriminasaka</i>	<i>Gridhrasi, Visamajwara, Karnarogas</i>
Nighantu Adarsh <sup>[17]</sup>	<i>Twachya, Jwaraghna, kasahara</i>	<i>Jwara, Kasa</i>
Priya Nighantu <sup>[22]</sup>	<i>Krimihara, Jwarahara</i>	<i>Jeernajwara, Yakrit – Plihavriddhi, Krimi, Gridhrasivata</i>
<i>Data base of Medicinal plants<sup>[15]</sup></i>	<i>Vedanasthapana, Deepana, Krimighna</i>	<i>Gridhrasi, Sandhivata, Krimi</i>

**VERNACULAR NAMES<sup>[15]</sup>**

<b>Sanskrit</b>	:	<i>Parijata, Parijatah, Parijataka, Sephalika.</i>
<b>Bengali</b>	:	<i>Harsinghar, Sephalika, Seoli, Sheoli.</i>
<b>English</b>	:	<i>Coral Jasmine, Night Jasmine.</i>
<b>Gujarati</b>	:	<i>Jayaparvati, Parijatak</i>
<b>Hindi</b>	:	<i>Harsinghar, Harsingur, Seoli, Sheoli, Sihau.</i>
<b>Kannada</b>	:	<i>Goli, Harsing, Parijata.</i>
<b>Konkani</b>	:	<i>Pardic, Parizatak, Parzonto, Parzot.</i>
<b>Malayalam</b>	:	<i>Mannapu, Pavizhamalli, Parijatakam</i>
<b>Marathi</b>	:	<i>Kharbadi, Kharassi, Khurasli, Parijatak.</i>
<b>Oriya</b>	:	<i>Godokodiko, Gunjoseyoli, Singaraharo.</i>
<b>Punjabi</b>	:	<i>Harsinghar.</i>
<b>Tamil</b>	:	<i>Manjhapu, Pavala- Malligai, Pavazha-Malligai.</i>
<b>Telugu</b>	:	<i>Kapilanagadustu, Pagadamalle, Parijat ,Sepali.</i>
<b>Urdu</b>	:	<i>Gulejafari, Harsingar.</i>
<b>Filipino</b>	:	<i>Coral Jasmine.</i>
<b>Indonesian</b>	:	<i>Srigading (Sundanese, Javanese)</i>
<b>Lao (Sino-Tibetan)</b>	:	<i>Salikaa</i>
<b>Malay</b>	:	<i>Seri Gading</i>
<b>Thai</b>	:	<i>Karanikaa</i>
<b>Vietnamese</b>	:	<i>Iai Tau</i>

**Properties and Uses<sup>[15]</sup>**

*Rasa* - *Tikta*

*Gupa* - *Laghu ,Ruksha*

*Virya* - *Ushna*

*Vipaka* - *Katu*

*Karma* - *Pitta saraka, Jhantugna, Keshya, Vedanasthapana, Dipana, Anulomana, Jwaraghna, Krimighna.*

**Useful part<sup>[15]</sup>**

- Leaf
- bark
- seed

**Dosage**<sup>[15]</sup>

- Juice 10-20 ml.
- Powder 1-3 gm.
- Decoction 50-100ml

**Important Formulations mentioned in classics**<sup>[15]</sup>

- *Nastapushpantakaras*
- *Sankapushpitail*
- *Sephalika Kwath*

**TAXONOMICAL CLASSIFICATION**

<b>Kingdom</b>	:	Plantae
<b>Division</b>	:	Magnoliophyta
<b>Class</b>	:	Magnoliopsida
<b>Order</b>	:	Lamiales
<b>Family</b>	:	Oleaceae
<b>Genus</b>	:	Nyctanthes
<b>Species</b>	:	Arbotristis

**Medicinal properties and uses mentioned in modern texts**<sup>[15,16]</sup>

*Nyctanthes arbotristis* has a bitter and acrid taste.

The expressed juice of the leaves acts as Cholagogue, Laxative and mild bitter tonic.

It is useful in diseases of Spleen enlargement, Round Worm Infestation, Sciatica, Fevers, Bronchitis, Rheumatism, arthritis, skin diseases, hepatic disorders, haemorrhoids.

The juice of leaves with honey is given in chronic fever.

In children it is remedy for round worms.

The bark in combination with *Arjuna* bark is considered to be useful in internal injuries and healing.

Flowers are useful in eye diseases, dyspepsia, greyness of hair.

Chewing of root alleviates Enlargement of Uvula, tonsillitis.

Table No: 5 Presenting various chemical constituents of plant *Nyctanthes arbortristis*<sup>[15]</sup>

Chemical Compound	Plant Part
D-mannitol	Leaves
$\beta$ -sitosterole,	Leaves
Astragaline,	Leaves
Nicotiflorin,	Leaves
Oleanolic acid,	Leaves
Nyctanthic acid,	Leaves
Tannic acid	Leaves
Ascorbic acid	Leaves
Methyl salicylate,	Leaves
Volatile oil	Leaves
Friedeline	Leaves
Lupeol	Leaves
Mannitol	Leaves
Glucose	Leaves
Diterpenoidnycanthin	Flower
Flavonoids	Flower
Anthocyanins	Flower
Essential oil	Flower
$\beta$ -monogentiobioside	Flower
$\beta$ -digentiobioside	Flower
Arbortristoside A & B	Seed
Glycerides	Seed
Lignoceric acid	Seed
Stearic acid	Seed
Palmitic acid	Seed
myristic acids	Seed
3-4 secotriterpene acid	Seed
D-glucose	Seed
D mannose	Seed
Iridoid	Bark
Phenylpropanoid	Bark

#### Various Pharmacological Activities of *Nyctanthes arbortristis* linn(*Parijatha*)

- 1) Anti-inflammatory activity<sup>[8]</sup>
- 2) Anti Nociceptive activity<sup>[8]</sup>
- 3) Antipyretic activity<sup>[9]</sup>
- 4) Antimalarial activity<sup>[10]</sup>
- 5) Antimicrobial and Antifungal activities<sup>[11]</sup>
- 6) Anti Diabetic activity<sup>[12]</sup>
- 7) Hepatoprotective activity<sup>[13]</sup>
- 8) Antiallergic activity<sup>[14]</sup>

### Therapeutic Uses with Reference

- Decoction of *Parijatha* leaf is used for the management of *Udakameha* (Su.Chi.11/8).
- *Parijatha* leaf is mentioned as *Anusastra* (Su.Chi.8/15).<sup>[23]</sup>
- *Parijatha* along with other drugs was indicated in various diseases like *Arbuda* (Utt.12/25), *pitruagraha Chikitsa* (A.S.Utt.6/33).<sup>[24]</sup>
- Leaves of *Sephalika*, *Jivanti*, *Eranda* are boiled in the ghee and consumed in the treatment of *Dosanda chikitsa* (A.H.Utt.13/90).<sup>[25]</sup>
- *Parijatha* with other drugs *Sigru*, *eranda*, *mudga* made into paste and applied into warm and thick and applied in the treatment of *Vatajavidradi*.(sarangadara samhita,11/93).<sup>[27]</sup>
- *Parijatha* in the form of *kwatha* was indicated in *Udakameha chikista*.(B.P, *Madhyamakhand*,chi.38-44)
- Decoction of *Sephalika* leaves prepared on mild fire alleviates severe sciatica (Chakradatta 59/22).<sup>[26]</sup>
- Intake of bark of *Parijatha* with oil, sour gruel & rock salt remove pain in the caused by *Kapha and vata* (Vangasena 71/124).<sup>[28]</sup>
- Leaves of *Sephalika* is used in the treatment of *Arshas*(Vrindhamadhav 5/146).<sup>[29]</sup>

### CONCLUSION

*Parijatha* is a potent drug that has been used for various ailments since more than hundred years. Due to it's broad spectrum use in health management it is described in all most all ancient literatures. The above article documented and revealed pharmacognostical study, phytochemicals study and pharmacological activities of plants. This review conclude that it is a good remedy for many ailments, however it should be more verified through extensive clinical researches which can be beneficial to mankind.

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